DOCUMENT RESUME

ED 326 781 CG 022 991

TITLE	Anabolic Steroid Misuse among Minors. Report to the Governor and the General Assembly of Virginia. House Document No. 58.
INSTITUTION	Virginia State Health Professions Dept., Richmond.
PUB DATE	Jan 90
NOTE	89p.; Inside title is variant of title on cover page.
PUB TYPE	Reports - Descriptive (141)
EDRS PRICE	MF01/PC04 Plus Postage.
DESCRIPTORS	Agency Cooperation; Athletic Coaches; Athletics; *Drug Abuse; *Drug Education; *Educational Policy; Elementary Secondary Education; Prevention; *State Legislation; *State School District Relationship
IDENTIFIERS	*Steroids; *Virginia

ABSTRACT

This document comprises the final report of the Virginia Department of Health Professions' Task Force on anabolic steroid misuse among minors. As such, it summarizes the activities of the department and of the boards within the department, the Offices of the Secretary of Health and Education, and other organizations including the Virginia High School league and the Virginia Parent and Teachers Association confronting the steroid problem. After an executive summary, the first section reports on activities related to House Joint Resolution 439 which calls on the state medical and pharmaceutical boards to take steps to ensure better monitoring, control, distribution, prescription, and dispensing of anabolic steroids. The boards are considering necessary measures, including definition of steroid prescription as unprofessional practice and rescheduling steroids and accounting for their use. The next section reports on activities related to House Joint Resolution 440 which calls on the relevant state officials to develop and coordinate the use of education and prevention materials; to document steroid use and profile young users; to encourage prohibition of steroid use in high school athletics; and to encourage positive growth and development of every Virginia child. The following materials are appended: (1) executive summary of the 1989 report of the Task Force; (2) legislation and resolutions of the 1989 General Assembly; (3) two papers from a Statewide Symposium on Anabolic Steroids; and (4) data from a survey of Virginia athletic coaches. (TE)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED326781

CG

REPORT OF THE DEPARTMENT OF HEALTH PROFESSIONS ON

Anabolic Steroid Misuse Among Minors

TO THE GOVERNOR AND THE GENERAL ASSEMBLY OF VIRGINIA

HOUSE DOCUMENT NO. 58

COMMONWEALTH OF VIRGINIA
RICHMOND
1990

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☒ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Charles Hubbard

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

CG022991

COMMONWEALTH of VIRGINIA

Department of Health Professions

Bernard L. Henderson, Jr.
Director

1601 Rolling Hills Drive, Suite 200
Richmond, Virginia 23229-5005
(804) 662-9900
FAX (804) 662-9943
TDD (804) 662-7197

January 26, 1990

To: The Honorable Lawrence Douglas Wilder
Governor of the Commonwealth of Virginia

The Members of the General Assembly of Virginia

It is my privilege to present the accompanying report which constitutes the response of the Department of Health Professions to the request contained in House Joint Resolution No. 439 of the 1989 Session of the General Assembly of Virginia. The Resolution addresses problems related to the misuse of anabolic steroids by minors and others in the Commonwealth.

This report also responds to House Joint Resolution No. 440 which is also concerned with anabolic steroid abuse. That Resolution requested the Secretary of Health and Human Resources and the Secretary of Education, as well as several private organizations, to take certain actions related to the prevention of steroid abuse. By arrangement with Secretary Teig and Secretary Finley following the adjournment of the 1989 Session, activities related to HJR 439 and HJR 440 were coordinated by a Task Force on Anabolic Steroids appointed by this Department in 1988.

This Department wishes to formally express appreciation to the members of the Task Force. Over the past two years, these leaders contributed their time, talents and skills generously and without compensation. Because of their effort, Virginia stands at the forefront of states in understanding and preventing the spread of anabolic steroid misuse, and in enacting legislation making it possible to punish those who traffic illicitly in these dangerous drugs. Task Force members richly deserve our gratitude.

Bernard L. Henderson, Jr.
Bernard L. Henderson, Jr.

FINAL REPORT OF THE TASK FORCE ON ANABOLIC STEROID MISUSE AMONG MINORS

TO THE DIRECTOR

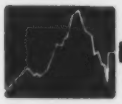
VIRGINIA DEPARTMENT OF HEALTH PROFESSIONS

ON

THE STUDY OF THE USE AND MISUSE OF ANABOLIC STEROIDS

IN RESPONSE TO

HOUSE JOINT RESOLUTIONS NO. 439 AND 440 OF THE 1989 VIRGINIA GENERAL ASSEMBLY



Department of Health Professions

January 1990

MEMBERS OF THE TASK FORCE ON ANABOLIC STEROIDS

of the

DEPARTMENT OF HEALTH PROFESSIONS

Donald E. Anderson, Ed.D. Board of Professional Counselors Board of Health Professions	Roanoke Chairman
Robert F. Baxter, M.D. Board of Medicine (1988-89)	Grundy
Ernest L. Clements, Jr., M.D. Team Physician, University of Richmond	Richmond
John W. Gephart, Assistant Special Agent-in-Charge Department of State Police Pharmaceutical Drug Diversion Program	Richmond
Richard O. Gifford Athletic Director, Lynchburg Christian Academy	Lynchburg
The Honorable Christopher W. Hutton Commonwealth's Attorney, City of Hampton	Hampton
Harvey J. Meltzer, R.Ph, Director of Pharmacy Children's Hospital of the King's Daughter Board of Pharmacy (1983-88)	Norfolk
William Savage Assistant Principal, Fairfax High School	Fairfax

---

Task Force Staff

Richard D. Morrison, Ph.D., Executive Director
Board of Health Professions

Keith T. Fentress
Research Assistant

In Cooperation With

Jeane L. Bentley, Associate Director
Health, Physical Education and Driver Education Services
Department of Education

Marla G. Coleman, Supervisor, Youth Risk Prevention
Department of Education

TABLE OF CONTENTS

Members of the Task Force on Anabolic Steroids Among Minors . . i

EXECUTIVE SUMMARY 1

BACKGROUND 2

REPORT ON HOUSE JOINT RESOLUTIONS NO. 439 AND 440

Activities Related to House Joint Resolution No. 439 . . . 4

- o Definition of Steroid Prescription as Unprofessional Practice 4
- o Rescheduling Steroids and Accounting for Their Use 5

Activities Related to House Joint Resolution No. 440 . . . 7

- o Education and Prevention Materials 7
- o Documenting Steroid Use and Profiling Young Users . .8
- o Encouraging Prohibition of Steroids Use in High School Athletics 11
- o Encouraging Positive Growth and Development 12

Acknowledgements 13

APPENDIX

A. Executive Summary of 1989 Report of the Task Force

B. Legislation and Resolutions of the 1989 General Assembly

C. Statewide Symposium on Anabolic Steroids

1. Symposium Agenda
2. Introduction to Anabolic Steroid Abuse for Virginia School Counselors
3. Media Guide for Middle and High School Counselors

D. Survey of Virginia Coaches

EXECUTIVE SUMMARY

For the past two years the Task Force on Anabolic Steroids Misuse Among Minors has studied problems related to the use of anabolic steroids by high school athletes and other youth in the Commonwealth. The Task Force was appointed by the Director of the Department of Health Professions in response to a request by the 1988 Session of the Virginia General Assembly (House Joint Resolution 88).

In its 1989 report to the Director, the Task Force summarized the state of knowledge regarding the extent and risks of use of steroids by young people, and recommended a number of actions that could be taken to curtail the use of anabolic steroids. Based on recommendations in that report, the 1989 General Assembly:

- enacted legislation to increase the penalty for illegal manufacture, sale, distribution or possession of anabolic steroids (House Bill 1418, 1989);

- approved resolutions requesting additional activities by agencies of the Commonwealth and other organizations, and continuing the work of the Task Force (House Joint Resolutions No. 430 and 440);

This final report of the Task Force summarizes the activities of the Department of Health Professions and boards within the Department, the Offices of the Secretary of Health and Human Resources and the Secretary of Education, the Department of Education, and other organizations including the Virginia High School League and the Virginia Parent and Teachers Association in confronting the steroid problem.

The Task Force believes these responses represent a good beginning to the understanding and effective prevention of steroid use by minors. Rarely have agencies of government and the private sector coalesced so quickly to recognize a problem, assess its extent and causes, and promote action to prevent its spread. The movement from study resolution to innovative, decentralized, but systematic action traced in this final report gives the Task Force reason for considerable optimism.

Although the report presents no recommendations for additional legislation or mandates for specific action at this time, agencies of the Commonwealth should remain vigilant, in monitoring the initiatives now underway and determining the need for further action.

BACKGROUND

In response to growing concerns about the use and misuse of anabolic steroids by minors in the Commonwealth, the 1988 Session of the Virginia General Assembly requested the Department of Health Professions to study issues related to steroid use by young athletes and to report its findings and recommendations to the 1989 Session.

The Director of the Department of Health Professions empaneled a special Task Force on Anabolic Steroid Misuse Among Minors consisting of members of health professional regulatory boards, practitioners of sports medicine, law enforcement officials, a practicing pharmacist, and school officials concerned with high school athletic programs. The Task Force was charged to conduct a study and report its findings to the Director.

The Task Force presented its report to the Director in December, 1988. The Director endorsed the findings and recommendations and transmitted the report to the Virginia General Assembly (House Document No. 39 of the 1989 Session). The Executive Summary and Recommendations of that report are appended (Appendix A).

As recommended by the Task Force, the 1989 General Assembly enacted legislation to increase penalties for the illegal manufacture, sale, and distribution of anabolic steroids, and approved resolutions to continue the Task Force study and to request additional action by agencies of the Commonwealth and voluntary organizations. The actions consisted of the enactment of H.B. 1418 (1989 Virginia Acts of Assembly Chapter 567) and approval of House Joint Resolutions No. 439 and 440. Copies of the legislation and the Resolutions are appended (Appendix B).

Enactment of H.B. 1418 amended Code of Virginia, Sec. 18.2.248.5 as follows:

Illegal stimulants and steroids; penalty. -

A. Except as authorized in the Drug Control Act (Sec. 54.1-3400 et seq.), Chapter 34 of Title 54.1, it shall be unlawful for any person to knowingly manufacture, sell, give, distribute or possess with intent to manufacture, sell, give or distribute any anabolic steroid.

A violation of subsection A. shall be punishable by a term of imprisonment of not less than one year nor more than ten years or, in the discretion of the jury or the court trying the case without a jury, confinement in jail for not more than twelve months or a fine of not more than $20,000, either or both.

House Joint Resolution No. 439 directed the Department of Health Professions to continue its study and to oversee implementation of the following recommendations.

- **The Boards of Dentistry, Medicine, Pharmacy and Veterinary Medicine were requested to initiate appropriate action to define in statute or regulation the prescribing or the filling of a prescription for anabolic steroids for other than legitimate purposes as unprofessional conduct and to advise their respective members accordingly.**

- **The Department of Health Professions was requested to document the quantity of anabolic steroids distributed, and the number of and purposes for which prescriptions for such drugs are filled in Virginia during a calendar year.**

- **The Board of Pharmacy was requested to consider the rescheduling of anabolic steroids.**

House Joint Resolution No. 440, while not directed specifically to the Department of Health Professions, resulted from other recommendations of the Task Force. This Resolution requested that:

- **The Secretary of Health and Human Resources and the Secretary of Education jointly inventory, develop, and coordinate the use of educational and prevention materials on anabolic steroids for use in the public schools of the Commonwealth;**

- **The Governor's Drug Abuse Task Force determine the characteristics of anabolic steroid users and the prevalence of anabolic steroid use among high school students in Virginia, and identify the sources of supply of anabolic steroids and similar drugs as well as the methods of injection or ingestion and the duration of such drug use;**

- **The Virginia High School League adopt and promulgate rules to prohibit the use of anabolic steroids and other performance-enhancing substances by high school athletes and other students.**

Because the Task Force and the Department have participated directly or indirectly in each of the requested actions, this report summarizes activity related to both HJR 439 and HJR 440. By arrangement with the Director of the Department of Health Professions, the Secretary of Health and Human Resources, and the Department of Education, this final report of the Task Force represents the response of these agencies to the two Resolutions.

REPORT ON HOUSE JOINT RESOLUTIONS NO. 439 AND 440 OF THE 1989 SESSION OF THE GENERAL ASSEMBLY

The past year witnessed substantial growth in activity directed to preventing the inappropriate use of anabolic steroids among minors and adults in the nation and in the Commonwealth. These activities were spurred by worldwide media coverage that followed detection of anabolic steroid use by the Olympic champion Ben Johnson in Seoul in 1988, by exposes of steroid abuse by other professional and amateur athletes, and by the reporting of the tragic consequences of steroid abuse by still other sports figures.

In response to the public alarm that followed heightened media attention, the federal government and a growing number of states have mounted efforts to address the steroid problem. Virginia's leadership in documenting and preventing anabolic steroid abuse among minors is evidenced by continuing requests for the 1989 Task Force report and the use of the information reported as an authoritative summary of problems related to anabolic steroid misuse among minors.

This progress report on activities in which the Department of Health Professions and other agencies of the Commonwealth have played a role since the release of the 1989 Task Force addresses the specific concerns expressed in House Joint Resolutions Nos. 439 and 440.

ACTIVITIES RELATED TO HOUSE JOINT RESOLUTION NO. 439

The Department of Health Professions and individual health regulatory boards have assessed the need to define the prescribing or filling of prescriptions for steroids for other than legitimate purposes as unprofessional conduct, and reviewed the need to reschedule anabolic steroids from their current classification as Schedule VI drugs to a category requiring greater oversight and control.

Definition of Steroid Prescription as Unprofessional Conduct

The Boards of Dentistry, Medicine, Pharmacy, and Veterinary Medicine license practitioners authorized to prescribe or dispense controlled substances. These boards have considered measures necessary to curtail the inappropriate prescription or filling of prescriptions for anabolic steroids.

Although it is estimated that less than one percent of steroid products used for performance enhancement are supplied through licensed health professionals, the Department and the boards are committed to eliminating this source of steroids entirely.

- Two boards (Dentistry and Veterinary Medicine) were advised by counsel that current statutory and regulatory provisions are sufficient to define the prescription of anabolic steroids for illegitimate purposes as unprofessional conduct.

- Notwithstanding this advise, the Board of Veterinary Medicine will include specific reference to the diversion of veterinary steroid products for illegal use by humans in proposed regulations defining unprofessional conduct.

- The Board of Pharmacy has also determined that its statutory and regulatory authority is sufficient to discipline any licensed pharmacist, manufacturer, distributor or pharmacy found knowingly to dispense or distribute anabolic steroids for other than legitimate therapeutic purposes.

- The Board of Medicine has drafted a regulation to state explicitly that "it shall be considered unprofessional conduct for a licensee of the Board to sell, prescribe, or administer anabolic steroids to any patient for other than accepted therapeutic purposes." The notice of intent to formulate this regulation has been duly advertised, and the proposed regulation will be published shortly to become effective by spring, 1990, following a public comment period.

- Each of the four boards (Dentistry, Medicine, Pharmacy, Veterinary Medicine) will include reference to their authority to discipline licensees for inappropriate provision of steroid products in newsletters or bulletins directed to their licensees.

The 1989 report of the Task Force identified rural outlets for animal feeds and medications as an reported source of diversion of steroids for inappropriate use. Because these facilities are not completely controlled by provisions of the Drug Control Act, the Department and the Board of Veterinary Medicine continue to be concerned with this problem. Actions that may be required to remedy this problem are being explored by the Department and the Boards of Veterinary Medicine and Pharmacy.

Rescheduling of Anabolic Steroids and Accounting for Their Use

HJR 439 requested the Board of Pharmacy to consider rescheduling anabolic steroids to ensure better monitoring and control of their manufacture, distribution, prescription and dispensing.

In Virginia, anabolic steroids are classified as Schedule VI drugs. This classification includes all drugs not specifically included in Schedules I - V (drugs with decreasing potential for abuse) that must nonetheless be used only under the supervision of a licensed practitioner. There are few requirements for

record keeping or documentation of the use of Schedule VI substances.

The Resolution noted that other states have reclassified anabolic steroids as Schedule III, IV, or V substances, and that federal initiatives were under consideration for the rescheduling of anabolic steroids on the national level. Federal law to reschedule anabolic steroids would preempt state classifications.

Federal activity related to steroids has increased markedly since the time of the 1989 Task Force report. A national interagency coordination office for federal efforts to prevent illicit use of steroids has been established. That office advises that legislative proposals for federal rescheduling are gaining momentum and may be enacted by the current session of the U.S. Congress. In light of these developments, the Board of Pharmacy adopted a "wait and see" posture, rather than proposing rescheduling of anabolic steroids in Virginia at this time.

The Board of Pharmacy and the Department of Health Professions will monitor federal activity and reconsider this decision should federal rescheduling not occur within two years.

HJR 439 also requested the Department of Health Professions to document the stock and flow of anabolic steroids through channels of manufacture, distribution, prescription and dispensing in the Commonwealth over a calendar year period. Because record keeping requirements for Schedule VI substances are minimal, the Department has been unable to conduct a formal study, but field investigators and inspectors employed by the Department who are located throughout the Commonwealth have been directed to be vigilant to detect inappropriate use of anabolic steroids. No complaints related to suspected illicit use have been filed by Department staff or the public during the past two years.

ACTIVITIES RELATED TO HOUSE JOINT RESOLUTION NO. 440

The comments above relate to the direct involvement of the Department of Health Professions and the Boards of Dentistry, Medicine, Pharmacy and Veterinary Medicine in response to HJR 439. The Task Force and the Department also participated directly and indirectly in activity related to House Joint Resolution No. 440. These activities are summarized in the balance of this report. In addition, information supplied by the Virginia Department of Education and other agencies and organizations is presented as appropriate.

Education and Prevention Materials

HJR 440 requested the following activity recommended by the Task Force in its 1989 report.

> **The Secretary of Health and Human Resources and the Secretary of Education are requested to jointly inventory, develop and coordinate the use of educational and prevention materials on anabolic steroids for use in the public schools of the Commonwealth.**

Following the 1989 Session of the General Assembly the Chairman of the Task Force submitted a proposal to the Virginia Department of Education for the support of activity to inventory, develop and coordinate the use of educational and prevention materials on anabolic steroids. These efforts included the development of a model curriculum, the cataloging and evaluation of prevention materials for use in high schools, and consultation with federal, state and local educators, coaches and athletic trainers. The proposal was funded by the Department of Education through a grant to the Radford University Department of Education and Human Development which implemented the plan in cooperation with the Department of Health Professions

The effort culminated in a statewide symposium on anabolic steroids on December 1, 1989 in Richmond attended by nearly 100 high school coaches, physical education instructors, athletic trainers and others who are members of the Virginia Association for Health, Physical Education, Recreation and Dance. The agenda for the symposium and an overview and media guide for Virginia school counselors are appended (Appendix C).

The Department of Education has implemented a number of other initiatives over the past two years in response to concerns about steroid use.

- o In April, 1988 the department distributed a steroid education packet and information regarding a video release about steroids to all school divisions in the Commonwealth. The educational materials were developed by Fairfax County Public Schools and are designed to teach students in grades 9-12 the facts about steroids and the consequences of steroid use. In addition, the

department purchased a video entitled "Steroids: Shortcut to Make-Believe Muscles" which is available for loan to schools.

- In 1989, the Youth Risk Prevention Project developed a fact sheet entitled "Anabolic Steroids: The Hard-Hitting Facts Abut the Muscle-Building Drug" which was distributed statewide to schools and communities. The fact sheet is under revision to be included in the alcohol and other drug information section of the Youth Risk Prevention Resource Guide.

- In 1988 and 1989 workshops and information regarding steroid use were presented at the annual summer Youth Alcohol and Other Drug Abuse Prevention Conference (YADAPP). The department plans to continue workshops on steroids at the 1990 YADAPP Conference.

- The department is obtaining permission from the Broward County Public School System in Florida to use a comprehensive curriculum guide developed for use in secondary schools. When permission is received, the department will distribute this document to schools throughout the Commonwealth.

Documenting Steroid Use and Profiling Young Steroid Abusers

To implement the recommendation of the Task Force to develop a valid estimate of the numbers and characteristics of young users of anabolic steroids, House Joint Resolution 440 recommended the following activity.

> **The Governor's Drug Abuse Task Force is requested to determine the characteristics of anabolic steroid users and the prevalence of anabolic steroid use among high school students in Virginia, to identify the sources of supply of anabolic steroids and similar drugs, and determine the methods of injection or ingestion and the duration of such drug use.**

The Task Force submitted a number of questions on anabolic steroids to be included in a survey of drug use by high school students in Virginia planned by the Governor's Drug Abuse Task Force. To the knowledge of the Task Force, this survey has not yet been implemented.

In addition, in an attempt to measure high school coaches' perceptions of the anabolic steroid problem, the Task Force updated a survey of Virginia coaches first administered at the 1988 Statewide Coaches' Clinics sponsored by the Virginia High School Coaches' Association. Department staff analyzed the results of the survey which are summarized in the following comments and in Appendix D.

As with the first survey, about twelve percent (119) of approximately one thousand coaches attending 1989 Clinics in

Lynchburg responded to the survey. Because of the size and possible bias of the responding sample, care should be exercised in interpreting the findings. Comparisons of responses in 1988 and 1989 are nonetheless of interest.

Coaches' Perceptions of the Extent of Steroid Use

- Three percent of 1989 respondents believed the use of steroids by minors was "epidemic," and a cause for urgent concern. While this represents a relatively small number of coaches, the proportion of respondents who felt steroid use among high school athletes was epidemic tripled during the year between the surveys.

  Seventy percent of 1989 respondents felt steroid use was "rare, but constituted a real problem" (42 percent) or "fairly prevalent and a cause for concern," (28 percent). This represents a significant increase from the fifty percent of respondents who felt steroid use was a real or prevalent problem in 1988.

  While forty percent of respondents in 1988 believed steroid use among minors to be "extremely rare," constituting "no real problem," only twenty-seven percent reported this belief one year later.

  On the whole, coaches reported significantly more concern about steroids in 1989 than one year earlier. Their concern is based on personal knowledge or from trusted sources.

Perceptions of Minors' Understanding of Steroid Risks

- As in 1988, the great majority (92 percent) of responding coaches felt young steroid users and athletes were misinformed (48 percent) or poorly informed (44 percent) of the side effects and risks associated with steroid use.

  But nine percent of the coaches felt young athletes were "well informed" about risks in 1989, compared to only two percent who reported such beliefs one year earlier.

  Efforts to inform young people about the effects and risks of steroid use may be having some effect, but much more needs to be done. Nine out of ten coaches feel young athletes are poorly informed or misinformed about the benefits and risks of steroid use.

Do Coaches Condone Steroid Use?

- The proportion of responding coaches who "would never condone steroid use by young athletes" grew from 2/3 in 1988 to ninety percent in 1989.

  Paradoxically, a significant number of responding coaches continue to believe that "other coaches condone steroid

use," although the proportion of coaches reporting this belief declined from one-third in 1988 to one-fifth in 1989.

The belief that "the other guys are doing it" may prompt a permissive attitude among coaches when a "win at all costs" ethic prevails.

Who Influences Steroid Use, and Where are Steroids Obtained?

- Coaches were asked to rank the influence of a number of groups on the use of anabolic steroids by young athletes. They reported the least influential group to be physicians, and that only about one percent of steroids used by young people are prescribed by physicians or dentists.

  Other groups believed to have only limited influence on the behaviors of high school students were drug counselors, guidance counselors, schools in general, and parents.

  Responding coaches believe that groups with the greatest influence on steroid use are friends and peers, coaches, and team members and leaders.

  Consistent with this belief, coaches reported that they believed that one-third of steroids used by young athletes are supplied by friends. Dealers who frequent health clubs are believed to supply fourteen percent, and mail order sources account for about ten percent. Street dealers, health club employees and prescriptions combined are thought to supply less than ten percent.

Coaches' Opinions of Media Coverage of Steroid Problems

- Finally, 4/5 of responding coaches believed that current media attention and public concern was appropriate to the magnitude of the steroid problem. One quarter of the coaches thought media attention was inadequate, and about four percent thought coverage was "exaggerated."

  These responses differed significantly from 1988 when twelve percent thought media attention was exaggerated, seventeen percent believed coverage was inadequate and about 3/5 believed press coverage was "appropriate and justified, given the size of the problem."

Finding reliable data on the incidence and prevalence of anabolic steroid use among minors continues to be difficult. The Task Force used estimates compiled by the nation's leading authority on the use of steroids by young people, Dr. Charles E. Yesalis of The Pennsylvania State University. His surveys of minors in 1989 conclude that as many as 1/2 million young people in the nation are using, or have used anabolic steroids. He estimates that more than seven percent of high school males use or have used steroids.

As keynote speaker at the statewide symposium, Dr. Yesalis summarized more recent findings that a significant proportion of adolescent users "report behaviors, perceptions, and opinions which are consistent with psychological dependence in terms of their unwillingness to stop use, their perception of benefits from use, and their rationalization of their use."

Two factors from Yesalis' work should inform efforts to profile young anabolic steroid users and to target prevention and treatment approaches in the Commonwealth.

First, it appears that several distinct subpopulations of young users exist: elite athletes; "team players;" competitors in contests among individuals; bodybuilders and those more casually interested in physique enhancement, and; individuals who suffer from low self-esteem or generalized feelings of malaise and poor health. If it can be verified that these subpopulations exist, prevention efforts may need to be tailored to each group.

Second, psychological dependence, while not addiction in the classic sense, will require thoughtful treatment approaches that borrow appropriate methods from general chemical dependency programs but recognize that steroid users do not identify with alcohol or drug abusers.

The Task Force encourages the Governor's Drug Abuse Task Force in responding to House Joint Resolution No. 440 to collect reliable information on the incidence and prevalence of steroid use by minors in Virginia, including the identification of subpopulations of users.

Encouraging Prohibition of Steroids Among High School Athletes

The General Assembly agreed with the Task Force that efforts to curtail steroid use among young athletes and others will require local efforts by school boards, school administrators, coaches, teachers, and parents. House Joint Resolution No. 440 included the following request.

The Virginia High School League is requested to adopt and promulgate rules to prohibit the use of anabolic steroids and other performance-enhancing substances by high school athletes and other students.

Task Force members have worked with the leadership of the League which has responded by proposing the following statement for formal adoption to become effective July 1, 1990.

(High schools should) promote among their coaches and student athletes an awareness of the dangers of using steroids and other performance-enhancing substances and to undertake the development of public positions against their use.

Encouraging Attitudes to Foster Positive Growth and Development

While coaches are influential in decisions made by young athletes to use or abstain from steroids, the Task Force believes that parents and teachers in general are also influential in these decisions. Moreover, public policy initiatives to prevent steroid misuse must be coupled with efforts aimed at fostering positive growth and development and fair play.

Using information reported in the 1989 Task Force study as a basis, the Virginia Congress of the Parents and Teachers Association adopted the following Resolution in 1989.

> Resolved, that the Virginia PTA urge the Virginia High School League to promote among their coaches, trainers, health and physical education teachers and student athletes an awareness of the dangers of using anabolic steroids and other substances alleged to enhance performance; and be it further
>
> Resolved, that the Virginia PTA support the placing of anabolic steroids on the list of Controlled Dangerous Substances; and be it further
>
> **Resolved, that the Virginia PTA through its local units, councils and districts urge parents, students, school administrators, teachers, coaches and community members to unite in developing attitudes, actions and activities that enable every child to perform at his or her own 'peak performance' level through sensible nutrition, physical training and positive reinforcement.**

The Task Force concurs with the Virginia PTA that the philosophy embodied in the final Resolve represents the best antidote for steroid fever.

ACKNOWLEDGEMENTS

Members of the Task Force appreciate the opportunity to be of service to the government and people of Virginia through participation in the two year study of anabolic steroid misuse among minors.

The wisdom of Delegate Kenneth R. Plum in sponsoring the original study resolution and the ensuing legislation and requests for follow-up activity, and the leadership of Bernard L. Henderson, Jr., Director of the Department of Health Professions have placed Virginia among the leading states in addressing steroid abuse problems. The encouragement of Governor Gerald L. Baliles, the Honorable Eva S. Teig, Secretary of Health and Human Resources, and many others in Virginia government kept the Task Force motivated to pursue solutions to the steroid problem.

The Task Force also acknowledges the assistance of the Honorable Donald J. Finley, Secretary of Education, Dr. S. John Davis, Superintendent of Public Instruction, and the staff of the Department of Education, including Jeane L. Bentley, Associate Director for Health, Physical Education and Driver Education Services, and Marla G. Coleman, Supervisor of Youth Risk Prevention. The support of the Department of Education made it possible to translate recommendations made in the first year of the anabolic steroid study to realities in the second.

Finally, we are grateful for the enthusiasm of student athletes and their coaches, trainers, parents, and teachers, and of civic and community leaders and their voluntary organizations in joining this effort to halt the spread of anabolic steroid misuse. The Commonwealth may well be proud of its future leaders and of the many role models who inspire Virginia's youth through their own actions, values, and principles of fair play.

APPENDIX A

EXECUTIVE SUMMARY OF 1989 REPORT OF THE TASK FORCE

V. EXECUTIVE SUMMARY AND RECOMMENDATIONS

Following a year-long, comprehensive study, the Task Force finds that a serious problem of anabolic steroid misuse by minors exists in Virginia and that legislative and administrative action by the Commonwealth is needed to address this problem.

Although exact data are not available, national estimates of anabolic steroid use by adolescents suggest that seven percent (7%) of male high school seniors use or have used anabolic steroid to enhance athletic performance or personal appearance. Virginia coaches and athletic directors recognize that adolescents in the Commonwealth also use and abuse anabolic steroids and that this misuse is growing. The vast majority of high school students is uninformed or misinformed about the dangers of anabolic steroids, preferring to believe extravagant claims that use of these dangerous drugs is necessary to gain a competitive edge, or an enhanced or idealized bodybuilder image.

Scientific evidence supports the conclusion that some relatively minor gains in specific performance measures may be facilitated by the use of anabolic steroids in combination with rigorous training and careful dietary regimens. These benefits, however, are far outweighed by evidence that anabolic steroid use can cause serious health problems and negative psychological effects. Among these effects are liver damage, cardiovascular disease, increases in blood pressure, cholesterol imbalances and enlarged breasts. Effects on the male reproductive system include reductions in sperm production, decrease in size and tissue changes in the testes, and reductions in the amount of sex hormone output. In females, steroid use may lead to disruptions in ovulation and the menstrual cycle, as well as clitoral enlargement, increased body and facial hair and other secondary male characteristics. Use before maturity may stunt normal physical growth and development in both sexes.

. Psychological effects attributed to the use of anabolic steroids include increased or decreased sex drive, mood swings and depression and aggressive, even violent behavior. Many of the adverse physical and psychological effects depend on the amount of steroid used and the length of time steroids are used. There is no method of predicting which individuals are likely to experience these adverse effects.

Athletes and others who use anabolic steroids typically inject or ingest doses ten times or more the dosages approved for legitimate medical purposes. The injection of steroids causes special concerns related to AIDS transmission. "Stacking"--the use of several steroids at one time--is common, and many users attempt to temper negative effects by taking still other drugs, engaging in a kind of "pharmaceutical roulette."

An extensive black market has arisen in Virginia and throughout the nation to supply the increased demand for anabolic steroids by young athletes and bodybuilders. While some drugs available from illicit sources are of pharmaceutical quality, an increasing number of counterfeit drugs are smuggled into the United States from abroad or manufactured in clandestine laboratories in this country. The labeling and packaging of these bogus drugs of unknown composition defies easy detection.

A major source of supply includes employees and dealers who peddle steroids in or near gyms and "body shops" catering to young athletes and bodybuilders. While only a small quantity of anabolic steroids is believed to be supplied by licensed health providers (doctors, pharmacists and veterinarians), occasional diversion does occur and this practice should be subject to severe penalty.

Educational programs to stem the rising misuse of anabolic steroids must be carefully designed, coordinated and, above all, believable to avoid problems with credibility. Evidence exists that adolescent users include several subgroups--competitive athletes, bodybuilders and others interested in physique enhancement, and those who believe steroids will make them healthier--each of which must be targeted in prevention efforts. More research is needed to document the prevalence of anabolic steroid use and to refine the profiles of adolescent users.

Special efforts must be made to inform youth, their parents, and especially coaches and athletic directors of the dangers of anabolic steroid misuse. While most Virginia coaches report that they would never condone steroid use, others believe that other coaches actively or tacitly support the practice. Coaches as well as professional and amateur athletic champions who serve as role models for young sports enthusiasts comprise a special target for education and prevention effort.

At a more profound level, education and prevention efforts must address the "win-at-all-costs" ethic among some misguided young athletes and their coaches, trainers, counselors, and parents, as well as school athletic fans and enthusiasts.

Public alarm about anabolic steroid abuse is driving a number of policy reforms at the federal level and among the states. These include better enforcement, changes in laws to reclassify anabolic steroids and to increase penalties for possession, distribution, diversion and sale, and as well the production and distribution of educational materials.

While it is too early to evaluate the effects of these new programs and to tailor recommendations upon these evaluations, the Task Force is convinced that action is necessary in the absence of perfect information if further damage to Virginia's youth is to be prevented. We encourage the Director of the

Department of Health Regulatory Boards to support the following recommended actions and to initiate procedures necessary for their implementation at the earliest feasible moment:

1. Legislation should be enacted by the 1989 General Assembly to classify the illegal possession, sale, distribution or intent to sell or distribute authentic, or counterfeit, or bogus anabolic steroids as a felony with penalties to consist of fines up to $20,000 and/or imprisonment for one to ten years. This monetary penalty is greater than that specified for Class 5 felonies [Code of Virginia, Sec. 18.1-10(e)] by virtue of the profits accruing to vendors of authentic, counterfeit, and/or anabolic steroids.

2. The Task Force respectfully requests that its services be continued through 1989 to monitor the implementation of the recommendations in this Report and to advise the Director of the Department of Health Regulatory Boards of additional actions that may be required to protect the public health, safety and welfare.

3. The Boards of Medicine, Dentistry, Pharmacy and Veterinary Medicine should be requested to initiate appropriate action to define in statute or regulation the prescription or the filling of a prescription of anabolic steroids for other than legitimate medical purposes as unprofessional conduct and to inform all licensees of this action and of possible consequences of failure to comply.

4. The Virginia Department of Health Regulatory Boards should be requested to document the quantity of anabolic steroids distributed, and the number and purposes of prescriptions written and filled for anabolic steroids within the Commonwealth during the calendar year 1989.

5. The Virginia Board of Pharmacy should be requested to consider the rescheduling of anabolic steroids and to prepare recommendations for rescheduling these substances in Virginia.

6. The Virginia Department of State Police should be requested to develop and coordinate special regulatory and enforcement activity by appropriate State and local government agencies to curtail the use, sale, and exchange of anabolic steroids in and around gyms, health clubs, and bodybuilding salons.

7. The Governor's Drug Abuse Task Force should be requested to survey anabolic steroid use among high school students in the Commonwealth. Particularly important is the credible documentation of the incidence and prevalence of use, sources of supply,

quantity and type of substances used, methods and modes of injection or ingestion, duration of use, and explicit characteristics of users.

8. The Secretary of Health and Human Services and the Secretary of Education of the Commonwealth should be requested jointly to empanel an ad-hoc advisory committee to inventory, develop and coordinate the use of educational and prevention materials on anabolic steroids by local school districts throughout the Commonwealth. Representation on this committee should include all appropriate State agencies, the Virginia High School League, coaches' associations, student athletic organizations, parent and teachers organizations, and other relevant organizations and individuals.

9. The Virginia High School League should be encouraged to adopt and promulgate in the Official Handbook rules to prohibit the use of performance-enhancing drugs and substances by high school athletes and other high school students.

10. Federal and State efforts to locate and destroy clandestine laboratories and distribution networks involved in the illegal manufacturing, distribution and sale of anabolic steroids and of counterfeit or bogus anabolic steroid products should be intensified.

11. At the federal level:

    - The Interagency Task Force on Anabolic Steroids of the U.S. Justice Department, Food and Drug Administration and Federal Bureau of Investigations should be encouraged to intensify and coordinate efforts of the federal and state governments to curtail the availability and use of anabolic steroids by minors;

    - The U. S. Attorney General and the Secretary of Health and Human Services should consider evidence supporting the desirability of scheduling anabolic steroids federally as a controlled substance in an effort to better control and account for the manufacture, distribution and use of anabolic steroids in the United States.

    - The Congress of the United States should be memorialized to ensure increased attention to and visibility of the abuse of anabolic steroids as part of a national, comprehensive effort to address and prevent drug abuse by the nation's youth.

The Task Force appreciates this opportunity to be of service to the Department of Health Regulatory Boards, the Virginia Legislature, and the citizens of the Commonwealth.

APPENDIX B

LEGISLATION AND RESOLUTIONS OF THE 1989 GENERAL ASSEMBLY

Amendment to Increase Penalties for Illegal Sale of Steroids

House Joint Resolution Number 439

House Joint Resolution Number 440

CHAPTER 567

An Act to amend and reenact § 18.2-248.5 of the Code of Virginia, relating to illegal sale of anabolic steroids; penalties.

[H 1418]

Approved March 24, 1989

Be it enacted by the General Assembly of Virginia:

1. That § 18.2-248.5 of the Code of Virginia is amended and reenacted as follows:

§ 18.2-248.5. Illegal stimulants and steroids; penalty.– *A. Except as authorized in the Drug Control Act (§ 54.1-3400 et seq.), Chapter 34 of Title 54.1, it shall be unlawful for any person to knowingly manufacture, sell, give, distribute or possess with intent to manufacture, sell, give or distribute any anabolic steroid.*

A violation of subsection A shall be punishable by a term of imprisonment of not less than one year nor more than ten years or, in the discretion of the jury or the court trying the case without a jury, confinement in jail for not more than twelve months or a fine of not more than $20,000, either or both.

B. It shall be unlawful for any person to knowingly sell or otherwise distribute, without prescription, to a minor any ~~anabolic steroid~~ or any pill, capsule or tablet containing any combination of caffeine and ephedrine sulfate.

A violation of this ~~section~~ *subsection B* shall be punishable as a Class 1 misdemeanor.

HOUSE JOINT RESOLUTION NO. 439

Continuing the Department of Health Professions' study on the use and misuses of anabolic steroids among minors.

Agreed to by the House of Delegates, February 6, 1989
Agreed to by the Senate, February 23, 1989

WHEREAS, the 1988 General Assembly directed the Department of Health Professions to study the use and misuse of anabolic steroids among minors; and

WHEREAS, the Department established a task force to examine these issues and to submit to the Department its findings and recommendations; and

WHEREAS, the task force found that although exact data are not available, national estimates of the anabolic steroid use by adolescents suggest that seven percent of male high school seniors use or have used such drugs; and

WHEREAS, many adolescents are unaware of the dangers of anabolic steroids and that the benefits from the use of such drugs are far outweighed by the serious health problems which may result; and

WHEREAS, it is necessary to educate and alert health care providers concerning this growing problem and to solicit their support and expertise in its eradication; and

WHEREAS, the Department of Health Professions has the responsibility of regulating the practice of certain health professions and carries out this mission through various health boards which govern the specific health areas; and

WHEREAS, these boards consist of persons with expertise in various health practice and specialty areas who could appropriately advise the Department's task force concerning the use and misuse of anabolic steroids; and

WHEREAS, these boards also have the authority to investigate and review the practices of the professionals whom they license; and

WHEREAS, continuation of the study would enable the Department through its task force to monitor the implementation of its recommendations, many of which affect the various health professions boards; now, therefore, be it

RESOLVED by the House of Delegates, the Senate concurring, That the Department of Health Professions' study on the use and misuse of anabolic steroids among minors is continued. The Department of Health Professions shall provide oversight for the implementation of its recommendations and for coordinating a study of the following:

The Boards of Medicine, Dentistry, Pharmacy and Veterinary Medicine are requested to initiate appropriate action to define in statute or regulation the prescribing or the filling of a prescription for anabolic steroids for other than legitimate purposes as unprofessional conduct and to advise their respective members accordingly.

The Department of Health Professions is requested to document the quantity of anabolic steroids distributed, the number of and purposes for which prescriptions for such drugs are filled in Virginia during a calendar year.

The Board of Pharmacy is requested to consider the rescheduling of anabolic steroids.

The Department of Health Professions shall complete its study in time to submit the findings and recommendations of the Boards of Medicine, Dentistry, Pharmacy and Veterinary Medicine in its report to the Governor and the 1990 Session of the General Assembly pursuant to the procedures of the Division of Legislative Automated Systems for processing legislative documents.

HOUSE JOINT RESOLUTION NO. 440

Requesting the Secretary of Health and Human Resources, the Secretary of Education, the Governor's Drug Abuse Task Force and the Virginia High School League to initiate certain actions regarding the use of anabolic steroids.

Agreed to by the House of Delegates, February 2, 1989
Agreed to by the Senate, February 14, 1989

WHEREAS, the 1988 Session of the General Assembly directed the Department of Health Professions to study the use and misuse of anabolic steroids among minors; and

WHEREAS, the Department established a task force to examine these issues and to submit to the Department its findings and recommendations; and

WHEREAS, the task force found that although exact data are not available, national estimates of the anabolic steroid use by adolescents suggest that seven percent of male high school seniors use or have used such drugs; and

WHEREAS, many adolescents are unaware of the dangers of anabolic steroids and that the benefits from the use of such drugs are far outweighed by the serious health problems which may result; and

WHEREAS, it was determined that a multidisciplinary approach is necessary to address the need for education of adolescents about the use of such drugs and to curb the growing illegal distribution and use of anabolic steroids; and

WHEREAS, the task force has submitted various recommendations for action respecting its findings; now, therefore, be it

RESOLVED by the House of Delegates, the Senate concurring, That the Secretary of Health and Human Resources, the Secretary of Education, the Governor's Drug Abuse Task Force and the Virginia High School League initiate certain actions regarding the use of anabolic steroids.

The Secretary of Health and Human Resources and the Secretary of Education are requested to jointly inventory, develop and coordinate the use of educational and prevention materials on anabolic steroids for use in the public schools of the Commonwealth. The secretaries shall seek the participation of relevant state agencies, the Virginia High School League, coaches' associations, student athletic organizations, parent and teacher organizations and other interested persons in the review of such materials.

The Governor's Drug Abuse Task Force is requested to determine the characteristics of anabolic steroid users and the prevalence of anabolic steroid use among high school students in Virginia, identify the sources of supply of anabolic steroids and similar drugs, and determine the methods of injection or ingestion and the duration of such drug use.

The Virginia High School League is requested to adopt and promulgate rules to prohibit the use of anabolic steroids and other performance-enhancing substances by high school athletes and other students; and, be it

RESOLVED FURTHER, That the Clerk of the House of Delegates shall transmit copies of this resolution to the Secretary of Health and Human Resources, the Secretary of Education, the Governor's Drug Abuse Task Force and the Virginia High School League in order that they may be apprised of the sense of the General Assembly.

APPENDIX C

STATEWIDE SYMPOSIUM ON ANABOLIC STEROIDS

1. Symposium Agenda

2. Introduction to Anabolic Steroid Abuse for Virginia School Counselors

3. Media Guide for Middle and High School Counselors

ANABOLIC STEROID ABUSE AMONG MINORS

A Preconvention Symposium in conjunction with the Virginia Association for Health, Physical Education, Recreation and Dance

Presented by:
Radford University Department of Education and Human Development
Virginia State Department of Education and
The Department of Health Professions of Virginia

December 1, 1989
Hyatt Regency Hotel Richmond, VA

- **Preconvention Symposium Registration:**

  12:00 - 12:45

- **Concurrent Workshops Session I:**

  1:00 p.m. - 2:15 p.m.

Session A:	"Schools Without Drugs: The U.S. Office of Education's Concern About Substance Abuse in America's Schools"
Presenter:	Mr. Eugene "Sonny" Kane Region III U.S. Office of Education
Session B:	"New and Innovative Approaches to Anabolic Steroid Abuse Detection and Prevention"
Presenter:	Jon Almguist, ACT, ETT President, Northern Virginia Sports Medicine Association Head Athletic Trainer Marshall High School Falls Church, Virginia
Session C:	"Steroid Abuse and the Law: A National and State Perspective"
Presenters:	Mr. Dennis Degan National Steroids Investigation Coordinator U.S. Food and Drug Administration
	John W. Gephart, Assistant Special Agent -In-Charge Virginia State Police BCI/DIU

- Concurrent Workshop Session II

2:30 p.m. - 3:45 p.m.

Session D:	"Curriculum Materials for Anabolic Steroid Abuse Prevention in Virginia Schools"
Presenter:	Dr. Elaine Smith Ms. Patricia Barrett Department of Health and Physical Education Radford University

Repeat Session B and C

- Workshop Session III

4:00 p.m. - 5:15 p.m.

Repeat Session D

- Dinner and Key Note Address:

6:00 p.m. - 7:15 p.m.

Welcome:	Donald Anderson, Ed.D. Chairman, Legislator Task Force on Anabolic Steroids Abuse in Virginia
Introduction:	Mr. Bernard Henderson, Director Department of Health Professions Commonwealth of Virginia
	Delegate Kenneth Plum House of Delegates Virginia General Assembly
Key Note Address:	"Anabolic Steroid Abuse: A National Perspective of Concern"
	Dr. Charles E. Yesalis, III Professor of Health and Human Development Pennsylvania State University

AN INTRODUCTION TO ANABOLIC STEROID ABUSE FOR VIRGINIA SCHOOL COUNSELORS

Prepared By:

Donald Anderson, Ed.D.

Licensed Professional Counselor

Professor, College of Education and Human Development

Radford University

Radford, Virginia

December 1, 1989

Support for this project was provided by a grant from the Virginia Department of Education, Youth Risk Prevention Project.

An Introduction to Anabolic Steroid Abuse for Virginia School Counselors

Donald Anderson, Ed.D
Licensed Professional Counselor
Professor of Education, Radford University
Radford, Virginia

INTRODUCTION

A recent Gallop Poll of 1005 people, ages 18 and older, and 500 youth ages 12-17, was conducted in June and July 1989. Respondents to the national survey identified drug abuse as the number one problem in the United States. One-fourth of surveyed youth ages 13-17 had been confronted with an offer to use an illegal drug in the preceding 30 days and one-fifth had friends who were regular drug users. The survey found that 72% of surveyed adults viewed drug use as "wide spread". Young people between the ages of 16 and 34 were identified as being most exposed to drug use and illicit drug sales.

Anabolic steroid abuse has emerged as a new substance abuse problem that involves yet another drug-related threat to the health and safety of youth in Virginia. Steroid abuse is becoming an increasingly common occurrence among a fairly well defined group of users including male and female competitive athletes, and physical fitness or body building enthusiasts. Although commonly associated with football players and body builders, anabolic steroid abuse has been reported among athletes competing in a broad range of sports including football, wrestling, cycling, swimming, and track and field sports. Non-athletes who value a "Rambo-like" physique may also find anabolic steroids an attractive shortcut to physique enhancement.

Anabolic steroid use has long been associated with athletes in professional sports and, to a lesser extent, collegiate athletes. In 1985, a national drug use study conducted by The College of Human Medicine, Michigan State University found that 8% of collegiate athletes use anabolic steroids for performance and physique enhancement (Michigan State University, 1985). A 1988 national study of 3403 high school seniors, reported that 7% of respondents were current or previous users of anabolic steroids (Buckley, et al., 1988). Over 70% of the respondents indicated use before age 16 and one-third of these users surveyed did not play high school sports.

Reasons for using anabolic steroids vary. In the only national study of the use of anabolic steroid by high school youth Buckley, et al., found the main reason for using anabolic

steroids was "to improve athletic performance" (47%). The second most common rationale for steroid use was to enhance physical appearance (27%) (1988, p.3443). Other common reasons often cited include: (a) competitive edge, (b) improved performance, (2) euphoria, (d) diminished fatigue, (3) stunted growth of gymnasts, (f) increased muscle development and strength, (g) use by peers, (h) literature evidence of positive drug effects, (i) accessability, (j) enhanced image and self-confidence, (k) decreased healing time after injury, and (1) increased aggressiveness (Reinke & Pearson, 1988, p.2). It seems that the compelling promises of anabolic steroids has lured professional and collegiate athletes, and an increasing number of teenagers, into yet another arena of illicit substance abuse (Bell & Malone, 1988; Buckley, et al., 1988).

WHAT ARE ANABOLIC STEROIDS?

Anabolic steroids are synthetic derivatives of the male sex hormone testosterone. Synthetic processing of testosterone can achieve a partial separation of the hormone's androgenic and anabolic effects (Haupt & Rovere, 1984, p.470). Testosterone has androgenic effects of stimulating development and maintenance of masculine traits. Anabolic influences bring about generalized growth of muscle tissue through the stimulation of protein synthesis. Anabolic steroid users desire synthetic or "designer" steroids with a high ratio of anabolic to androgenic effects.

These synthetic derivatives of testosterone produce increased strength, endurance and enhanced muscular physiques, while stimulating limited androgenic affects.

Anabolic steroids, sometimes referred to as "Roids", are often used with other drugs to avoid detection and for other purposes. Reinke and Pearson (1988) estimated that, including veterinary drugs, approximately 80 anabolic steroids are marketed worldwide. Others estimate the drug to have over 1000 designer variations, with more being continually created by chemists in clandestine laboratories. Some of the more common anabolic steroids are: Equipose, Deca-Durabolin, Dianabol, Anavar, Winstrol, and Anadrol.

The cost of illegal anabolic steroids obtained on the black market has been estimated to be $25 for a bottle of 100, 5 mg. tablets or $12 for 200 mg injections (Bell & Malone, 1988; Pearrell, 1989). Bell and Malone (1988) reported that their investigative journalism revealed that:

> With $25 and the right connections, a high school athlete easily can buy a month's supply of D-bol, the street name for counterfeit versions of Dianabol or other black market steroid. The connections can be made through teammates on body-building circles (p.A1).

Using anabolic steroids for non-medically necessary conditions is illegal in Virginia. The distribution or manufacture of anabolic steroids is a felony punishable by one to 10 years in prison and/or a $20,000 fine. Virginia law also prohibits possession of prescription drugs such as anabolic steroids. The existing penalty for anabolic steroid possession

is a $100 fine. Postal regulations prohibit mailing of poisons, drugs and medicines, and other federal regulations may also be violated by anabolic steroid distribution, such as illegal drug importation. Many other states have established severe penalties for the illegal use and distribution of steroids. In Florida, for example, illegal sale and possession of anabolic steroids are third-degree felonies carrying a maximum penalty of a $5000 fine, five years. In Alabama, a dealer convicted two or more times face a maximum sentence of life in prison (Bell & Malone, 1988; Morrison, et al., 1988 p. 26-27).

There are few legitimate medical purposes for using anabolic steroids (Shipe, 1988, p.1). Anabolic steroids have, however, been used in the medical treatment of osteoporosis, breast cancer, anemia, dwarfism and for the stimulation of sexual development.

THE DOUBLE-EDGE OF ANABOLIC STEROIDS

Recent international competitions between world-class athletes who have used anabolic steroids have revealed tragic personal consequences of a "win at all costs" attitude to athletic competition. Butt (1989), in a discussion of sports psychology and athletes' behavior, motivation and personality stated:

> Sport is destructive or constructive depending on whether the involvement leads to personal growth, well being, and maturity of character or whether it leads to

> human problems, disturbance, and diminishment of character. It is unfortunate that the search for excellence contains the potential seeds of destruction (p.163).

She concluded that "as people attempt to maximize performance there is as much potential for harm as for good to be done (p.163)." This observation certainly seems affirmed in tragic drama of recent olympic stars such as David Jenkins of Great Britain and Ben Johnson of Canada.

Anabolic steroid abuse offers the alluring promise of personal achievement at a potentially high human cost. The reason so many athletes use anabolic steroids despite legal, ethical and health related risks seems to be their reliability and effectiveness in enhancing athletic performance. Although scientific research has not provided conclusive proof of the effectiveness of anabolic steroids, strong anecdotal evidence from users and some research supports the conclusion that anabolic steroids, when used under certain conditions, are effective in increasing body strength, endurance and muscle mass (Buckley, et al., 1988; Kibble & Ross, 1987; Morrison, et al, 1989; Reinke & Pearson, 1988; Yesalis, 1988). Evidence suggests that using anabolic steroids, in combination with proper nutrition and intensive weight training, may result in the following desirable physiological and psychological effects:

1. Reversal of the negative effects of chronic catabolic states caused by the physiological stress of physical conditioning and exertion, resulting in more rapid recovery from intensive performance or training and the subjective experience of euphoria and well being;

2. Improved positive nitrogen balance following physical exertion, through enhance utilization of protein and increased nitrogen retention, which result in greater endurance, performance and feeling of well-being;

3. Anabolic steroids seem to combine with muscle cells to induce protein synthesis in skeletal muscle cells and to increase lean muscle mass and overall muscle strength; and

4. The experience of euphoria that may be secondary to the experience of diminished fatigue, increased endurance and more rapid recovery from fatigue as well as the relative experience of exceptional strength, enhanced physique performance and feelings of well-being.

Reinke and Parson (1988) concluded:

> In summary, although findings are contradictory, at least some well-designed studies indicate that highly trained athletes who use anabolic steroids can benefit in terms of demonstrably increased strength, assuming that protein intake is adequate and training is maintained during the period of steroid administration. Athletes who have not undergone a prolonged period of intensive training prior to steroid use are less likely to realize significant gains in strength ... (1988, p.9).

Evidence suggests that undesirable psychological and physiological effects of anabolic steroid use vary depending upon genetic make-up, drug types, dosages and duration of drug use. It has been reported that approximately 30% of users described side effects that subside with cessation of drug use. Most studies of adverse drug reactions were based on male subjects; few studies currently exist on the effects of anabolic steroid abuse in women and children. However, strong indications exist that women experience irreversible side effects of steroid use including: coarse hair growth, deepening of the voice, baldness,

shrinking of breast tissue and clitoral enlargement. Children and adolescents may experience premature closure of bone growth plates and irreversible stunting of growth.

A broad range of adverse drug reactions have been associated with male anabolic steroid abusers. Some of the common adverse drug reactions include:

1. Changes in libido or sex drive
2. Muscle spasms
3. Gynecomastia or breast enlargement
4. Liver function abnormalities
5. Liver lesions and tumors
6. High blood pressure
7. Shrinking testicles
8. Mood swings, irritability and nervous tension
9. Increased cholesterol levels
10. Significant risk for affective or psychotic disorders
11. Reduces sperm count and transient infertility
12. Acne
13. Psychological dependence

Adverse drug reactions have been found to occur in men, women and children. Adverse reactions in women appear permanent, while in men, the negative effects cease when the drugs are no longer being used. Other potential adverse health hazards associated with anabolic steroid use include hepatitis and AIDS which may result from bogus or contaminated black-marketed drugs

and sharing contaminated syringes.

LEGISLATIVE TASK FORCE FINDINGS

In 1988, the Virginia General Assembly requested a comprehensive study be conducted on the misuse of anabolic steroids among minors in Virginia. The year long study was conducted by a legislative task force appointed by the Department of Health Professions. The study involved an extensive analysis of anabolic steroid abuse from medical, legal, psychological, educational, coaching and user perspectives. The task force concluded that a serious problem of anabolic steroid abuse existed in Virginia. In its report submitted to the 1989 General Assembly (Morrison, et al., 1988), the task force recommended a broad range of legislative and administrative actions to resolve the emerging problem of anabolic steroid abuse among youth in Virginia. The task force found that:

> The vast majority of high school students is uninformed or misinformed about the danger of anabolic steroids, preferring to believe extravagant claims that use of the dangerous drugs is necessary to gain a competitive edge, or an enhanced or idealized body building image (Morrison, et al., 1988, p.29).

The study further concluded that positive benefits of anabolic steroid use can be achieved with rigorous training and careful dietary regimes. However, the group concluded,

> These benefits, however, are far outweighed by evidence that anabolic steroid use can

> cause serious health problems and negative psychological effects (1988, p.29).

The legislative task force proposed several recommendations that were adopted by the 1989 General Assembly, including an increase in the penalty to 1-10 years and/or a $20,000 fine for illegal possession, with the intent to sell or distribute anabolic steroids. In addition to several other administrative recommendations, the task force recommended that educational initiatives be taken to develop and coordinate the use of anabolic steroid abuse prevention materials in local school districts throughout the state.

THE VIRGINIA SCHOOL COUNSELOR'S ROLE IN ABUSE PREVENTION

Substance abuse is a major problem in Virginia schools and in most schools across the nation. In 1987, Secretary of Education William J. Bennett said "clearly, the alarm sounded about drugs is fully warranted" (U.S. Department of Education, 1987, p.v). The school counselor is a key professional within Virginia's schools who can assist in responding to this warranted alarm.

School counselors should involve themselves in educational and remedial programs to prevent anabolic steroid and other drug abuses in Virginia schools. The school counselor, being a trained helping professional and behavioral scientist, is challenged to provide direct and consultative counseling and guidance services to attenuate or prevent the rising incidence of substance abuse among school age populations. Virginia school counselors have a significant role to play in the school's response to an estimated 7% incidence of anabolic steroid use among student groups.

THE SCHOOL COUNSELOR: A CREDIBLE SCHOOL-BASED CONSULTANT

The task force's findings suggested that a considerable credibility gap exists between anabolic steroid users and members of the medical, scientific and educational communities. This information-credibility gap was established and maintained by

sensational claims of adverse side effects and a general reluctance, denial or lack of information regarding positive gains experienced by some anabolic steroid users. The gap in credibility has resulted in anabolic steroid users or potential users being more vulnerable to influence by an intense underground marketing network which promotes the virtues of new designer anabolic steroids and supports claims of experienced anabolic steroid users (Morrison, et al, 1988, Appendix B). Counselors are encouraged to seek balance and objectivity in their drug education efforts, to assure that users and potential users will be more attentive and responsive to credible school, community and family-based drug prevention efforts.

Although scientific research is not conclusive, some evidence strongly suggests that anabolic steroids do have modest positive benefits to the competitive athlete, body builder or person who seeks muscular physique enhancement. Significant adverse health risks are also strongly evident and general conclusions are that health risks generally outweigh advantages. Moreover, anabolic steroids are illegal and unethical in organized sports and increasingly, users are being caught through various means of monitoring and testing programs.

The counselor who desires more indepth understanding of the effects of anabolic steroid use or who is interested in sharing these resources with others in the school and community may find the following resources especially helpful: Anderson (1989), Barrett (1989), The Fairfax Journal (1988), Morrison, et al.

(1988), Reinke and Pearson (1988), Richmond News Leader (1989), Tobias (19), U.S. Department of Education (1987), U.S. Department of Justice, Drug Enforcement Administration (1984).

In addition to balanced and credible treatment of significant adverse health risks and advantages of anabolic steroid use, substance abuse prevention efforts should focus on underlying ethical and moral implications of steroid use. Specifically, the ethical issue of "fair play" and a rival sports ethic of "win at all costs". Compelling psychosocial conflicts of sports ethics should be explored from personal and social dimensions, incorporating perspectives of the team, peers, coaching staff and parents, all of whom play critical roles in the resolution of this ethical and moral adolescent dilemma.

PSYCHO-SOCIAL DIMENSIONS OF STEROID ABUSE

Substance abuse is the most pervasive problem confronting society and organized sports today. Drug related deaths, arrests, suspensions, disqualifications, suspicions, inquiries and rule changes have recently dominated sports news. A central issue in the etiology of drug abuse among competitive athletes is the often conflicting psychosocial dynamics of "win at all costs" or adherence to the traditional ethic of "fair play". In exploring the dilemma of competitive athletes, Martin & Thrasher (1989), stated:

> Unfortunately, tremendous pressures to perform at

> consistently optimal levels have frequently resulted in the use of drugs to maintain or improve performance. The "performance enhancement" drugs are used because many athletes believe they will give them the "competitive edge" over their opponents by increasing their endurance, level of energy, and strength (p.316).

The problem of athletes using drugs for performance enhancement is not a problem unique to the 1980's. Similar problems have historically plagued organized sports and were especially common in the 1960's involving amphetamines and cocaine in the 1970's. The school counselor should view a student athlete's striving to make the team and to win at all costs as central factors in the etiology of anabolic steroid use. Intense pressures on youth, especially males, to play competitive sports and to win at all costs may be sources of conflict, tension and unpleasant feelings which enhance the attractiveness of anabolic steroids. The source of negative influences leading to anabolic steroid abuse may be in extreme expectations and desires of the athlete, the team, as well as in implicit expectations of parents and the coaching or training staff.

Another important source of pressure to use anabolic steroids is suggested by the "peer cluster theory" or "social bond theory" of substance abuse (Oetting & Beauvais, 1986). This model of substance abuse behavior predicts that expectations of significant others (friends, fellow drug users or dealers) have considerable influence over adolescent substance abuse behaviors. These sources of peer influence to use drugs may be much greater than the broader expectations of society or less significant

others not to use drugs. The school counselor, and others concerned with anabolic steroid prevention should keep in mind that the loci of affiliation for the anabolic steroid users may include close friends, other consenting athletes, body builders, trainers or coaches. Based on the peer cluster theory, these groups have significant influence to induct youth into drug use and influence continual use or abstinence.

In discussing this theory of adolescent drug use, Oetting and Beauvais (1986) stated:

> Although we are able to identify a wide range of psycho-social characteristics that relate to drug involvement, we consistently found that the highest positive correlations were with peer encouragement to use drugs and the highest negative correlations were with peer sanctions against using drugs (1986 , p.19).

The school counselor should maintain a broad psychosocial perspective on the etiology of anabolic steroid use and should continually explore variables that discourage or support substance abuse. Oetting and Beauvis concluded that personal and social characteristics set the stage for substance abuse induction and drug use. They described several psychosocial characteristics that the school counselor may find helpful to consider:

> ...adolescent drug use is very strongly linked to membership in small groups of people, including pairs such as best friends and boyfriends-girlfriends. These small groups are peer clusters, in which (a) drugs are made available; (b) the youth learns to use them; (c) there is sharing of beliefs, attitudes, values, and rational for drug use; and (d) drug use plays an important role in group membership and identification. (1986, p. 19).

A significant finding made by the Virginia Task Force on Anabolic Steroid Abuse related to coaches influences on athletes to use anabolic steroids. The task force found that Virginia coaches perceived the primary source of anabolic steroid use by Virginia youth to be their friends and steroid dealers in health clubs. Sixty-eight percent of Virginia coaches surveyed by the task force stated they would never condone the use of anabolic steroids (Morrison, et al., 1988). However, coaches in various Virginia communities say that steroid abuse is on the rise (Bell & Malone, 1988). These findings and observations suggest that adolescents who use anabolic steroids may shift their locus of peer affiliation from non-using friends towards a narrow subgroup of friends who use and/or distribute anabolic steroids. One would also expect there to be a corresponding shift in peer affiliation and a shift to frequenting local gyms or training facilities where there is greater peer support for anabolic steroid use as compared to the home or school.

In consulting with school administrators, parent groups, coaches, teams, team leaders and trainers, the school counselor should explain the dynamics of the peer cluster model of substance abuse and emphasize the important role that peer pressure against substance abuse can play in reducing the incidence of anabolic steroid abuse among teens. Parent groups and school administrators may view this model of substance abuse behavior as a compelling rationale for proposing that schools provide improved training facilities, personnel and conditioning

programs to keep the school as the locus of student athletes' training and peer affiliation. With such a policy, coaches and trainers can positively influence athletes to achieve reasonable training, conditioning and performance goals without drug use. With such a program, training and conditioning can be achieved within a drug-free context with constructive team and other social supports.

Fairfax City School System has such an innovative program which maintains the school as the locus of student athletes' training and conditioning. The program is managed by school-based athletic trainers and coaches who educate student athletes and coordinate training and conditioning. Coaching and training staff also perform health screening for drug abuse symptoms and are active in drug abuse prevention programs. School-based training and coordination and supervision of athletes seems to be a viable component of an effective anabolic steroid abuse prevention effort in the schools. Jon Almquist, an athletic trainer at _G.C.Marshall High School in Falls Church, Virginia has emerged as an outstanding consultant to others interested in developing similar programs in their communities.

Dominant psychosocial factors contributing to anabolic steroid abuse among minors are summarized by the following four observations and conclusions:

1. Pressure to be physically attractive, to make the team and/or win in competitive sports are compelling goals that anabolic steroid use offers an alluring promise of achieving;

2. Personal and social influences to "win at all costs" versus the sports ethic of "fair play" may emerge from expectations of the individual, the team, the coaches, parents or society in general. Such influences tend to increase the intrinsic value of anabolic steroids, increase the benefit-cost ratio of drug use, and generally increase motivation to use performance enhancing drugs like anabolic steroids.

3. Vague, community, family, school, team and personal standards regarding drug abuse, passive denial of drug use or active encouragement by significant others tends to increase the incidence of drug use; and

4. Weakened affiliative ties with the social support of the family, coaches, school, peer group, and team may result in conditioning and training being centered around local gymnasiums or with others who may promote or condone drug use resulting in an increase in the likelihood of anabolic steroid abuse.

The school is a social system which can exert considerable influence to prevent substance abuse. Small clusters of peer relationships including "training partners", best friends, squads, coaches and parents are critical sources of influence to stop anabolic steroid abuse. Butt (1987) has stated that there are

> three enduring and essential ingredients for the development of athletes: a healthy relationship between parents, or parent substitutes, and their children; a unique relationship with a coach or coaches; and confidence in a support group (p.167).

School counselors should help parents seek to establish a balance between supportive encouraging and pushing to achieve a "personal best". They should consult with coaches and trainers, helping them to be objects of identification and a source of balanced

information, motivation and emotional support, equally with the most and least gifted and capable student athlete. The team should be encouraged to be a social referent group and a source of group support with salience and influence in the lives of each team member. The team and sub-groups within the team should be encouraged to exercise peer influence, to instruct and to reinforce team ideals and acceptable behaviors. When the team, coaches, and parents communicate expectations of "no performance enhancing drugs" and preeminence of the traditional sports ethic of "fair play", then, psychosocial influences to not use anabolic steroids will be effectively maximized. The school counselor can be instrumental within school and community settings in achieving these goals.

RECOMMENDATION FOR SCHOOL COUNSELORS AS CONSULTANTS

A comprehensive program of school-based counseling intervention to prevent anabolic steroid abuse should seek to accomplish remedial, developmental and preventive objectives. Developmental objectives are long-term efforts best accomplished through broader K-12 instructional and counseling programs. These goals are primarily achieved through classroom instruction in personal health and physical education classes which incorporate substance abuse information, concepts and strategies at developmentally appropriate times throughout the school's curriculum. The school counselor can and should be active in consultation with classroom teachers, especially health and physical education teachers, to achieve instructional and student development goals regarding anabolic steroids and other substance abuse topics.

Substance abuse prevention and remediation strategies are more central to counselor's functions in middle and high schools. The continuing and rising incidence of anabolic steroid abuse should be a special focus of concern for counselors in those school settings.

The following are recommendations to assist school counselors in enhancing their role in providing direct counseling services or consulting services to prevent anabolic steroid abuse

within their schools and communities:

1. Become basically familiar with advantageous and adverse characteristics of anabolic steroid abuse. Expand your understanding of this specific substance abuse problem and become recognized as a consultant to your school and community.

2. Identify yourself as a consultant to parent groups, school teams, the school administration, coaches and teachers. Keep in mind that student groups such as the Fellowship of Christian Athletes, Students Against Drunk Driving, and your school's local CADRE group are important groups who share concerns about drug abuse. These groups need your assistance and can be invaluable sources of help in presenting an anabolic steroid abuse prevention program.

3. Encourage parents, coaches, and your school administration and PTA to identify ways to increase your school's involvement in school-based training and conditioning of athletes. Investigate and study the Fairfax Virginia model of using high school athletic trainers and steroid abuse monitoring and prevention.

4. Challenge parents, the Booster Club, coaches, trainers and athletes to distinguish between a competition ethic to "win at all costs" and the traditional sports ethic of "fair play". Through presentations, panels and small group discussions help various groups explore underlying values of their competitive athletic programs. Through individual and group values clarification seek consensus on the schools' and teams' ethic of athletic competition.

5. Assist parent groups and student groups to explore whether the pursuit of enhanced performance through anabolic steroid use has been destructive or constructive for such superstars as David Jenkins and Ben Johnson. Assist them to explore whether performance enhancing drugs led to personal growth, well being and maturity of character or whether it led to harm, problems, disturbance and diminished character.

6. Through small group process, assist various concerned groups to explore legal and ethical means of gaining a competitive advantage through

such traditional strategies as better conditioning, health, and equipment, or strength of character, motivation, better coaching, and mind control. Compare these approaches to the illegal use of anabolic steroids.

7. Invite local team physicians, athletic trainers, professional counselors or other substance abuse specialists, drug enforcement professionals, or others who are knowledgeable, to a PTA, Booster club, or team meeting where you facilitate a panel discussion on the topic of steroid abuse.

8. Coordinate an "information booth" staffed by athletes from different sports and include a "fact sheet" that describe advantages and adverse outcomes of anabolic steroid use and urge students to not use drugs.

9. Consult with coaches and team captains to define ways they can increase peer influence to reduce the incidence of drug abuse, including anabolic steroids.

10. Consult with coaches and health and physical education teachers to assist them to be better informed about the psychosocial dimensions of anabolic steroid abuse.

RECOMMENDATION FOR REMEDIAL SERVICES

Parents, team members, coaches, trainers or concerned close friends are typically the most common sources of help in identifying and referring an anabolic steroid user. As is the case in other forms of substance abuse, self-referral is highly unlikely unless there are legal, disciplinary, or personal crises motivating or mandating that assistance be sought. Anabolic steroid abuse tends to be a very secretive behavior, supported by a close friend and/or a broader subculture of consenting body building or fitness enthusiasts and competitive athletes. Understanding observable effects of anabolic steroid abuse, patterns of peer affiliation, and the secretive nature of the abuser can assist in targeting potential users. The following characteristics of potential users may be helpful in user identification for referral and treatment:

1. Increasing pattern of secretive behaviors
2. Intercepting mail and unusual patterns of long distance phone calls. Foreign mail or other suspiciously packaged merchandise.
3. Literature and magazines about body building, anabolic steroids or diet supplements such as high protein foods and amino acids dietary supplements.
4. A shift in the locus of affiliation to groups of body building, weight lifting and physical training enthusiasts.
5. Use of drug related terms such as "stacking", "cycles", "D-Bol", "Juice" and "Roids".
6. Drug paraphanilia including large gage syringes, veterinarian supplies or anabolic steroids in

tablets or injectable solution.

7. Unusual, sudden and dramatic lean muscle mass gains or other dramatic physical development.

8. Mood shifts, rage, unusual aggressiveness and irritability.

9. Edema and/or gynecomastia.

The counselor can be helpful in the treatment of an anabolic steroid user primarily in the role of providing initial assessment and referral or as a short-term provider of information and psychological support. Counselors should be careful in accepting referrals and initiating treatment for anabolic steroid abuse in the context of the school setting. There are several reasons for this caution:

1. Constraints and limitations on school counselor's time for case management;

2. Affective symptomology that might be associated with anabolic steroid abuse, including prominent affective lability, aggressiveness, depression and potential for psychotic symptoms (Pope & Katz, 1988); and

3. High potential for health risks associated with reproductive, endocrine, and cardio-vascular system dysfunctioning and infections.

Although, in most cases, affective symptom patterns of an anabolic steroid user would tend not be significantly more severe than a mixed adjustment disorder, there is potential for significant physical and psychological complications. The school counselor may find it best to refer anabolic steroids abuse cases to a professional counselor, psychologist or psychiatrist who has

substance abuse expertise in this area. A medical referral to a family doctor or internist is also indicated in chronic abuse cases. Denial and affective withdrawal symptoms might also be expected, since there is evidence that anabolic steroids have potential for habituation and psychological dependence (Yesalis, et al. 1989). Yesalis (1989) found that:

> approximately a quarter of AS users in our study reported behaviors, perceptions, and opinions which are consistent with habituation, in terms of their unwillingness to stop use, their perception of benefits from use and their rationalization of their use. This over looking of health risks, real or perceived, is consistent with other adolescent drug behavior (p.113).

These observations seem especially true of anabolic steroid users who inject steroids rather than ingest them orally. Yesalis concluded that injectable users demonstrated a higher level of commitment to anabolic steroid use and are more susceptible to other health risks such as AIDS and hepatitis.

Counselors, consulting with team leaders, coaches and trainers should encourage team support and acceptance of athletes in treatment; however, strict enforcement of team rules regarding substance abuse is critical. Parents, coaches, trainers and team members are important components of the after-care experience of a former anabolic steroid user. Counselors may find support groups for users a viable strategy that has therapeutic value during drug treatment and during the after-care phase of

treatment. Strong peer, and other social support, with clearly expressed rules and expectations are important conditions for full recovery and adjustment following treatment. The school counselor is the most appropriate helping professional to manage an after-care treatment plan. Such a plan might incorporate coaches, team captains, trainers and parents and should focus on peer acceptance, encouragement, abstinence and appropriate and realistic sports striving and achievement motivation. The recovering anabolic steroid abuser will also need assistance in understanding peer influences which sustain abstinence from substance abuse, as well as alternatives to achieving enhanced performance and/or physical attractiveness through ethically and legally appropriate means.

SUMMARY

The rising incidence of anabolic steroid abuse in Virginia has resulted in an alarm being sounded. Youth in Virginia who use anabolic steroids place themselves at great risk for personal harm and injury. Anabolic steroids do enhance athletic performance and do stimulate an enhanced physique. Considerable evidence suggest that adverse drug reactions result in psychological and physical consequences that far outweigh advantages gained.

Motivations for drug use are multidimensional. Unrealistic

sports striving, a "win at all costs" sports ethic and psychosocial dynamics of peer pressure to use or abuse drugs form a confluence of causative factors which result in an increasing incidence of anabolic steroid abuse among minors.

The school counselor can be a valuable resource in school and community based programs to prevent steroid abuse. Through consulting and direct services, the school counselor can achieve developmental, preventive and remedial substance abuse goals and objectives. The school counselor is challenged to assume a central role in anabolic steroid abuse prevention. This resource has been provided to assist them in responding to that important challenge.

About the Author

Donald Anderson is a Licensed Professioanl Counselor and is Chairman of the Board of Professional Counselors in Virginia. He has chaired the Virginia Legislative Task Force on Anabolic Steroid Abuse Among Minors. Dr. Anderson is a Professor at Radford University in the Department of Human Services, College of Education and Human Development.

REFERENCES

Anderson, Donald. (1989). An anabolic steroids abuse guide for middle and high school counselors. Unpublished manuscript, Virginia Department of Education.

Barrett, Patricia F., Smith, M.E. (1989) Steroid use and abuse: An addendum to the drug education unit required by the commonwealth of Virginia for middle schools - grade 8. Unpublished manuscript, Virginia Department of Education.

Bell, Robert & Malone, Roger. (1988). High School athletes turning to steroids. The Fairfax Journal. January 13-15.

Buckley, W., Yesalis, C. Friedl, K., et al., Estimated prevalence of anabolic steroid use among male high school seniors. (1988). The Journal of the american medical association, 260(23), 3441-3445.

Butt, Dorcus S. (1987). Psychology of sport (2nd ed.). New York: Van Nostrand Reinhold Company Limited.

Haupt, Herbert A., & Rovere, George D. (1984). Anabolic steroids: A review of the literature. The american journal of sports medicine, 12(6), 469-482.

Kibbb, Michael W. and Ross, Mary B. (1987). Drug review: Adverse effects of anabolic steroids in athletes. Clinical Pharmacy. 6, p.686-692.

Martin, Herbert, Thrasher, Delia. (1989) Chemical dependency and treatment of the professional athlete. In G.W. Lawson & A.W. Lawson (Eds.), Alcoholism & substance abuse in special populations. (pp.315-323). Rockville, Maryland: Aspen Publishers, Inc.

Michigan State University, College of Human Medicine. (1985). The substance use and abuse habits of college student-athletes. Unpublished manuscript: Author.

Morrison, Richard D., Anderson, Donald, et al. (1988). Department of health regulatory boards report on anabolic steroid misuse among minors. Richmond, Virginia: Department of Health Professions.

Oetting, E.R., Beauvais, R. (1986). Peer cluster theory: Drugs and the adolescent. (1986). Journal of Counseling and Development. 65(1), 17-21.

Pearell, Tim (1989). Paying the price in steroid world. Richmond news leader. February 21, 1.

Pop, Harrison G., Jr., Katz, David 1. (1988). Affective and psychotic symptoms associated with anabolic steroid use. American Journal of Psychiatry. 145(4), p.487-490.

Reinke, Michael C., Pearson, Robert E. (1988). Anabolic steroid abuse. Sandoz Continuing Education for Pharmacists. 1(1), 1-16.

Tobias, Joyce M. (1986). Kid and drugs: A handbook for parents and professionals. Annandale, Virginia: PANDA Press.

U.S. Department of Justice, Drug Enforcement Admininstration. (1984). Team up for drug prevention. Washington, D.C.: Author.

U.S. Office of Education. (1987). What works: Schools without drugs. Washington, D.C.: Author.

Yesalis, Charles E., Streit, Andrea L., et al. (1989). Anabolic steroid use: Indications of habituation among adolescents. Journal of drug education. 19(2), 103-116.

AN ANABOLIC STEROIDS ABUSE MEDIA GUIDE FOR MIDDLE AND HIGH SCHOOL COUNSELORS

Prepared by:

Donald Anderson, Ed.D

College of Education and Human Development
Radford University
Radford, Virginia

In cooperation with
The Virginia State Department of Education
Youth Risk Prevention Project

December 1989

C-3 62

AN ANABOLIC STEROIDS ABUSE MEDIA GUIDE FOR MIDDLE AND HIGH SCHOOL COUNSELORS

INTRODUCTION:

The continual and increasing use of anabolic steroids by youth across the nation has caused considerable alarm. An estimated 7% of adolescent male high school seniors have used anabolic steroids to enhance athletic performance or personal appearance. The middle school and high school counselor can play a vital role providing relevant information about this substance abuse problem.

This media guide is provided to assist school counselors in consulting with coaches, trainers, parent groups, student groups and Health and Physical Education Teachers and in providing credible, balanced and objective information about anabolic steroid abuse among school-age youth.

Materials presented in this media guide have been selected because they stimulate critical thinking and confront issues of anabolic steroid abuse from a multidimensional perspective. Each media program incorporates objective information about the effects of steroids abuse in a engaging and dramatic fashion, while incorporating an emphasis on psychosocial conflicts of peer pressure, ethical dilemmas of competition, and personal desires to win. A youth's decision to use anabolic steroids, despite ethical conflicts, legal consequences and significant health risk, is a complex psychological and social process. This process may involve pressures to succeed, affiliate and maintain self esteem, during a very critical stage of adolescence development.

The following audio-visual resource materials, along with a companion resource document "An Introduction to Anabolic Steroid Abuse for School Counselors" provide School Counselors with substantial information that may be useful in developing and providing direct counseling services to students and consulting services to a broad range of individuals and groups in the school setting.

SUGGESTED AUDIENCES: Grade 7-12, Classes in Health and Physical Fitness, High School Coaches and Trainers, Parent of Junior and Senior High School Athletes and Student Groups.

Disney Educational Publication and Learning Corporation of America (Producer). (1988). Benny and the 'Roids': A film on steroid abuse. (Videocassette Recording No.68686VHS). Deerfield, IL: Coronet/MTI Film and Video.

PROGRAM CONTENT:

Benny and the 'Roids is the story of a teenage high school football player, Benny Zimmer, who has worked hard to be a starting linebacker on this year's team. When practice begins, however, Benny finds he cannot handle his bigger and stronger teammates. Desperate, he purchases anabolic steroids-drugs that increase muscle mass. Viewers follow Benny over the next few weeks to see the effects of the drugs on Benny's football efforts and social life. TIME: 25:27

INSTRUCTIONAL OBJECTIVES:

- To explain what anabolic steroids are
- To show the possible consequences of using anabolic steroids
- To demonstrate alternatives to achieving goals

(Disney Educational Publication, 1988)

Strand, Gerald A. (Writer), & Thompson, Charles (Producer). (1988). Steroids: Shortcut to Make-Believe Muscles. Videocassette recording (No. X04372). Chicago, IL: Encyclopedia Britannica Education Corporation.

PROGRAM CONTENT:

Using on-camera interviews with athletes, health educators, and medical professionals, this program explores the problem of the non-medical use of anabolic steroids. A number of young athletes give their reasons for not using these drugs. The program concludes with a detailed demonstration of a drug-free body development program.

INSTRUCTIONAL OBJECTIVES:

- Provides information on what steroids are, who uses them, and why.
- Describes the harmful long-term effects of using steroids.
- Illustrates how to say "no" when faces with the option of using steroids.
- Presents a drug free body development program.

(Britannica, 1988).

Disney Educational Publications and Learning Corporation of America (Producer). (1988). Body Building, Body Breaking. (Videocassette recording No. BZ-5299M). Deerfield, IL:Coronet/MTI Film & Video.

PROGRAM CONTENT:

This ABC 20/20 documentary report takes a look at the latest craze that is vanity-driven, not fitness conscious: the use of anabolic steroids. Over-zealous body builders and eager high school athletes are injecting steroids, sometimes directly into their muscles, at the risk of heart attack, liver tumors, permanent sterility, extreme personality changes and balding. This program warns that we must be aware of and deal with the pressures that cause young men who wish to build muscle rapidly to persist in using this substance illegally. (Disney Educational Publications, 1988).

Films for the Humanities and Sciences, Inc. (1987). Steroids & Sports. (Videocassette Recording No. FFH 1372). Princeton, NJ.

PROGRAM CONTENT:

Increasing use of steroids to improve athletic performance has physicians, trainers, sports officials, and families of athletes worried - for different reasons. Those who use steroids have an unfair competitive advantage over those who don't; they also take the considerable risk of steroids - induced cancer, heart disease and infertilization.

This program features a woman body builder who stopped using steroids when she stopped competing - with significant effects; a child who, for medical reasons alone, was given growth hormone to correct stunted growth; and an endocrinologist who offers guidelines on when and under what conditions the administration of hormones is medically indicated.

Films for the Humanities and Sciences, Inc. (1986). Steroids: Crossing the Line. (Videocassette Recording No. FFH 1016). Princeton, NJ.

PROGRAM CONTENT:

A dramatic and candid story of Great Britain's "fallen idol" David Jenkins, who by age 19, was "a golden boy" in international track and field competition. David Jenkins' story is told, describing his gradual induction into anabolic steroids abuse and further into illegal drug distribution and sale. The story is a careful weaving of personal ambition, greed and denial that led to the double disgrace of his personal humiliation and a federal conviction and prison term. Candid interviews are presented with drug dealers, drug manufacturers, internationally known athletes, and law enforcement professionals. These interviews paint an elaborate picture of the underground world of anabolic steroids manufacture, distribution, sale and use. A complete story is told from Jenkins' dreams of greatness to his tragedy of disgrace.

This documentary on Jenkins' fall from the heights of personal success is a fascinating true story that communicates the scientific facts and psychosocial dynamics of anabolic steroids use and abuse.

MATERIAL REQUESTS

Schools interested in the above education resource material should request them through:

Ms. Marla M. Coleman
Director
Youth Risk Prevention Project
Health and Physical Education Services
Virginia Department of Education
P.O. Box 6Q
Richmond, VA 23216-2060
SCATS: 225-2733

MATERIALS REQUESTS:

Sources of Additional Materials on Drug Abuse Prevention

Documents presented on display are not for distribution. The following information will help you in getting personal copies. Please leave these for others to view.

1. For Coaches Only: How to Start a Drug Prevention Program

   Team Up for Drug Prevention

   Drugs of Abuse: 1988 Edition

   Source: U.S. Department of Justice, Drug Enforcement Administration
   Demand Reduction Section
   1405 I Street, N.W.
   Washington, D.C. 20537

2. Schools Without Drugs: The Challenge. (1987) Vol. 2, No.2

   Source: Mr. Eugene "Sonny" Kane
   U.S. Department of Education
   3535 Market Street, Room 16350
   Philadelphia, PA 19104
   (215) 596-1001

3. National Standards for Youth Sports

   Source: The National Youth Sports Coaches Asoociation
   2611 Old Okeechobee Road
   West Palm Beach, FL 33409
   (404) 684-1141

4. Kids & Drugs: A Handbook for Parents and Professionals (1986)and PANDAA Newsletter

   Source: Joyce M. Tobier, RN
   Parents' Association to Neutralize Drug & Alcohol Abuse
   (PANDAA)
   P.O. Box 314
   Annandale, VA 22003
   (703) 750-9285

Thank you for using this flyer to order your personal copy.

APPENDIX D

1989 Survey of Virginia Coaches' Perceptions of the Anabolic Steroid Problem

CHARACTERISTICS OF COACHES RESPONDING TO THE SURVEY

- 119 responses were received
- 92 percent of the respondents were coaches

- 94 percent of respondents were employed in public schools
  - 35 percent were in city school systems
  - 58 percent were in county systems
  - 7 percent were in private school systems

  - 77 percent were in high schools
  - nine percent were in middle schools

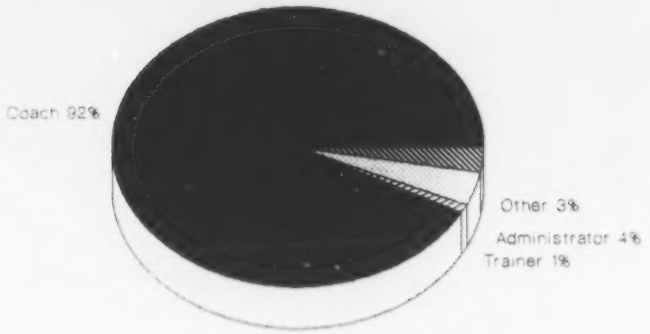
- 83 percent of respondents were male; 17 percent female

- one-half of the respondents were in rural schools
  - 28 percent were in suburban schools
  - 22 percent were in urban schools

- 63 percent of the respondents' students were male
  - 18 percent were female
  - 19 percent coached both males and females

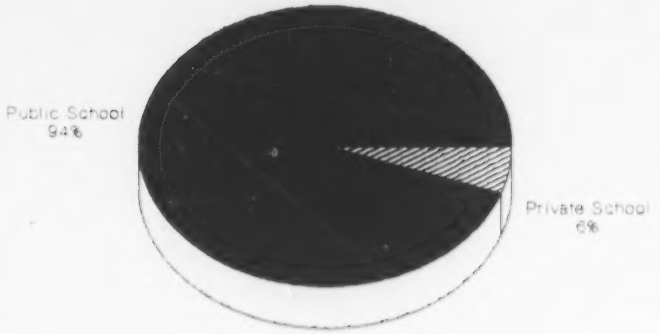
- - 21 percent of the students were aged 10-14
  - 30 percent were 14-16
  - 32 percent were 16-18
  - 16 percent were 18-21

Job Classification
Percentage in Each Job Category



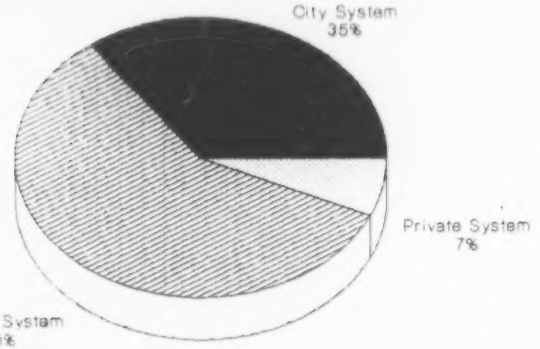
January 1990

Public or Private School
Percentage Employed at Each Type



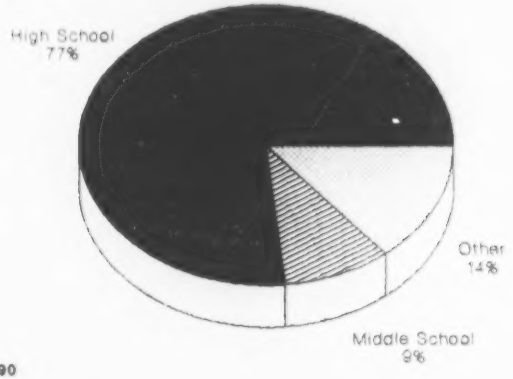
January 1990

School System
Employed in City, County, or Private



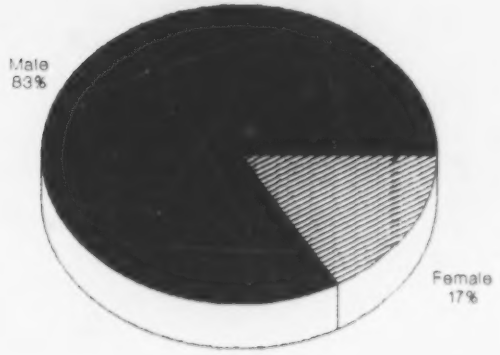
January 1990

School
Percentage Employed at Each School Type



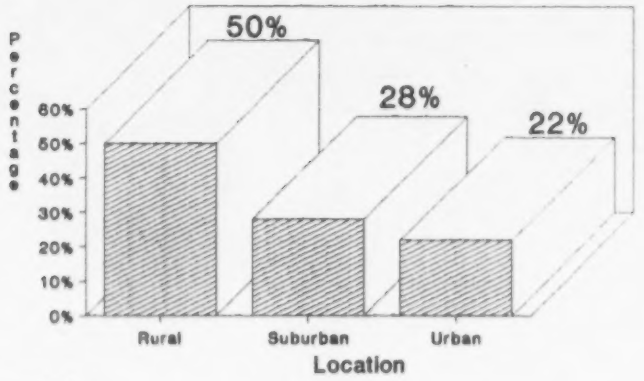
January 1990

Gender of Respondent
Percentage of Males and Females



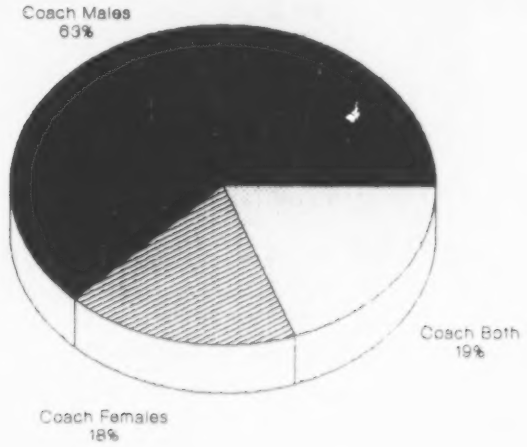
January 1990

Location
Rural, Suburban, or Urban Setting



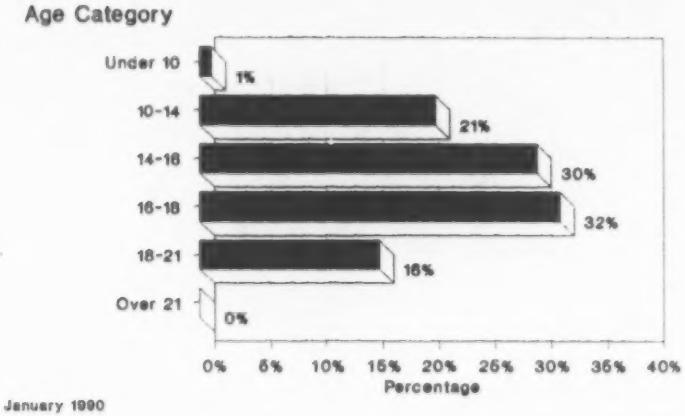
January 1990

Gender of the Athletes Coached



January 1990

Athlete's Ages
Percentage in Each Age Category



January 1990

COACHES' PERCEPTIONS OF STUDENTS' USE OF STEROIDS

- 42 percent of respondents believe steroid use is "rare, but a real problem," that is 1-5 percent of young athletes use steroids

---

- 28 percent think steroid use is "fairly prevalent; a cause for concern" that is, 5-10 percent of young athletes use steroids

---

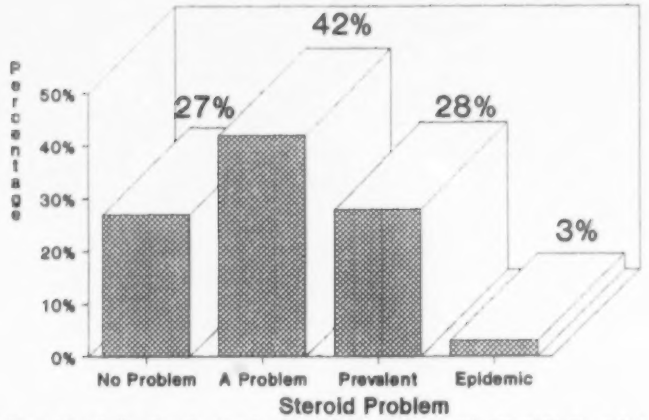
- 27 percent think steroid use is "extremely rare, no real problem" that is, less than one percent of young athletes use steroids

---

- three percent of respondents believe use is "epidemic; a cause for urgent concern"

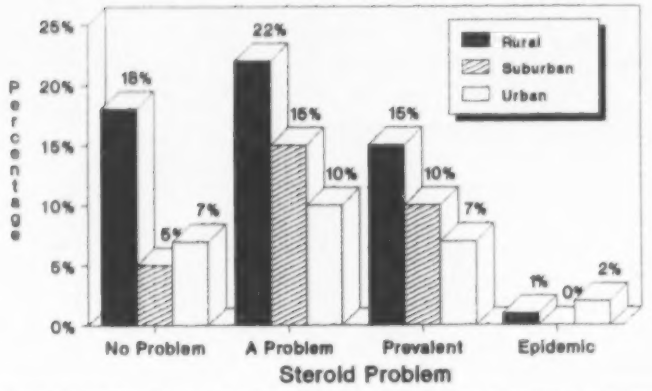
- there are differences in these beliefs among coaches in rural, suburban, and urban schools

Use of Steriods By Minors



I believe the following best characterizes the use of steroids by minors:

Use of Steriods By Minors
By Geographical Location of the School

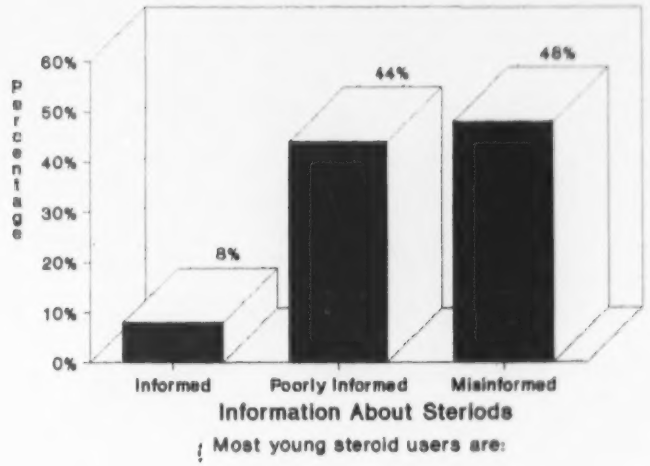


I believe the following best characterizes the use of steroids by minors:

COACHES' PERCEPTIONS OF STEROID USERS KNOWLEDGE ABOUT RISKS

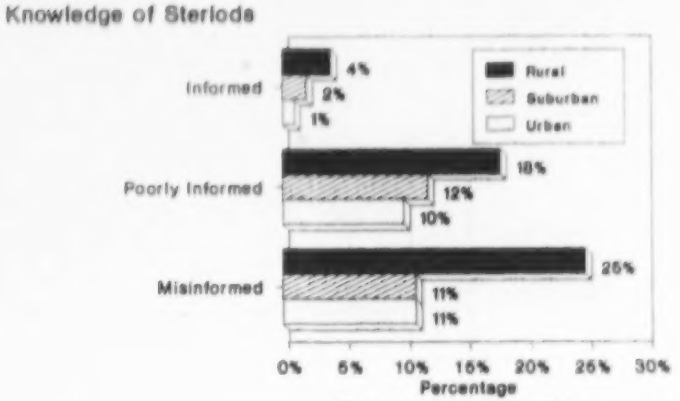
- nine of ten responding coaches think young steroid users are misinformed (48 percent) or poorly informed (44 percent)
- only eight percent thought steroid users to be well informed

User's Knowledge About Steriods



Most young steroid users are:

User's Knowledge About Steriods
By Geographical Location of the School



Most young steroid users are:

COACHES' PERCEPTIONS OF THE RELATIVE INFLUENCE OF GROUPS IN PREVENTING STEROID USE

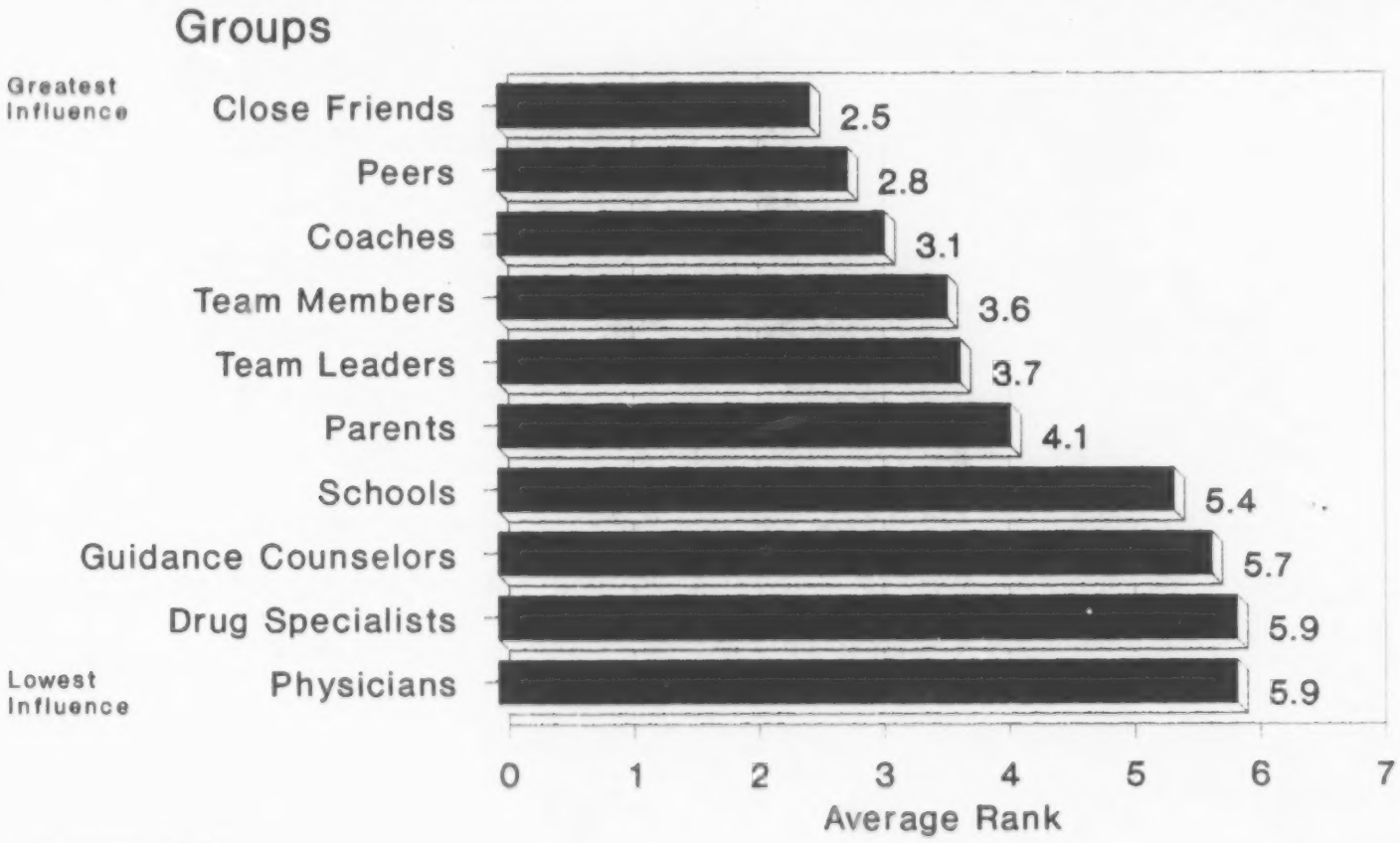
- coaches believe that physicians, drug counselors, guidance counselors, schools, and parents have relatively low influence on the behaviors of young athletes

---

- the groups they believe exert the strongest influence are
  - close friends
  - peers
  - coaches
  - team members and leaders

Groups That Have Influence in Preventing The Misuse of Steroids By Young Athletes

The lower the value the greater the influence of the group.



January 1990

PRIMARY SOURCES OF STEROIDS USED BY MINORS

- only one percent of respondents believe the primary source of steroids to be by prescription

---

- few coaches also think that street dealers of health club employees are primary sources

---

- nine percent of respondents think that a primary source is by mail order from illegal sellers

---

- 14 percent think dealers who frequent health clubs are primary sources

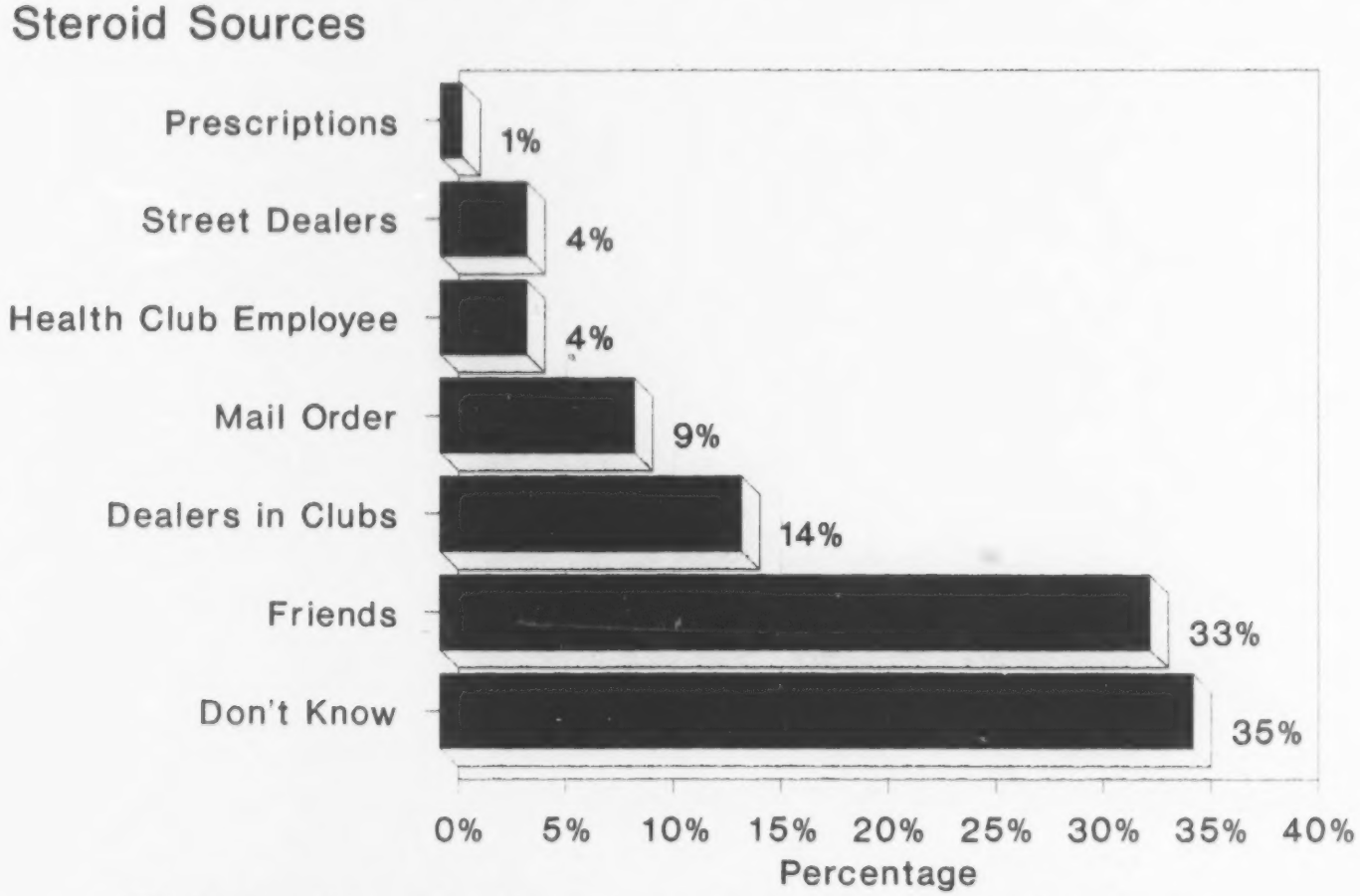
---

- one-third of respondents think the primary source of steroids is from friends

---

- 35 percent of respondents reported they did not know the primary source of steroids used by minors

Primary Sources of Steriods



The steroids minors use are obtained primarily from:

DO COACHES CONDONE STEROID USE?

- nine of ten respondents would "never condone" steroid use by young athletes

---

- three percent would condone steroids "if the benefits outweighed the health risks"

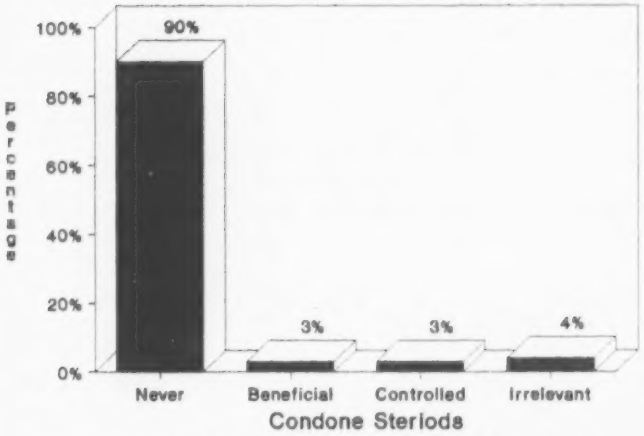
- another three percent would condone steroids "under carefully controlled conditions"

- four percent of respondents believe that steroid use is "irrelevant, not a coach's role"

BUT

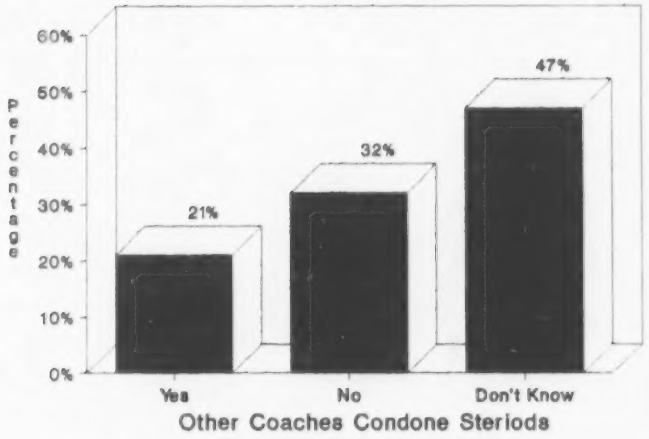
- 21 percent of respondents believe that other coaches condone steroid use by young athletes

Condone Steroid Use By Young Athletes



I would condone steroid use by young athletes:

Do Other Coaches Condone Steroid Use?



Do you believe other coaches condone steroid use among young athletes:

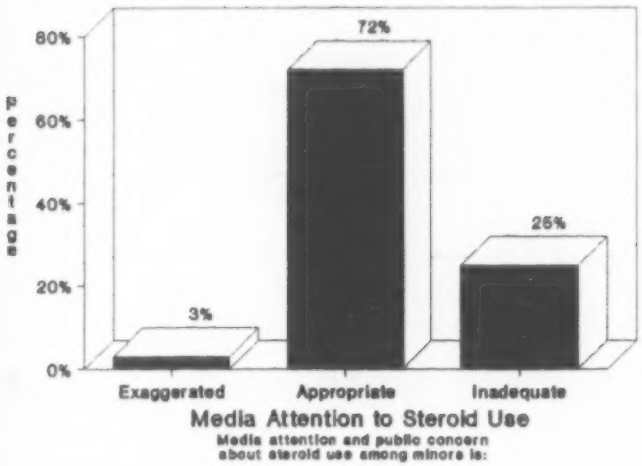
COACHES' OPINION OF MEDIA COVERAGE OF STEROID RISKS

- only about three percent of respondents believe that media coverage is "exaggerated; there is no pervasive problem"
- 72 percent think media attention is "appropriate and justified, given the size of the problem"
- one-quarter of the respondents think media coverage is "inadequate"

COACHES' KNOWLEDGE OF HEALTH RISKS IN STEROID USE

- more than one-half (56 percent) of respondents believe their personal knowledge of steroid health risks to be "adequate"
- 38 percent think their knowledge is "inadequate"
- only four percent believe their knowledge is "extensive"
- only two percent characterized their knowledge as "poor to none"

Media Attention and Public Concern



Coaches' Awareness Of Steroid Health Risks